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# BOW CORRIDOR
# ANNOTATED BIBLIOGRAPHY

## FINAL REPORT

**MARCH, 1992**

SCOPE
Environmental Auditing
Services Corporation

92-04528/

# BOW CORRIDOR

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## FINAL REPORT

**MARCH, 1992**

**Prepared for:**

**ALBERTA ENVIRONMENT**

**Prepared by:**

**SCOPE ENVIRONMENTAL AUDITING SERVICES CORPORATION**
**Calgary, Alberta**

**in association with**

**RIDDELL ENVIRONMENTAL RESEARCH LIMITED**
**Calgary, Alberta**

SCOPE

Environmental Auditing Services Corporation

March 31,1992

Hon. Ralph Klein
Minister
Alberta Environment
130 Legislature Building
Edmonton, Alberta T5K 2B6

Dear Mr. Klein:

Re: Bow-Canmore Information Data Base

We are pleased to submit herewith our final report cataloguing the information base in and adjacent to the area known as the Bow-Canmore Corridor. THIS REPORT SUPERSEDES THE DRAFT SUBMITTED MARCH 6, 1992. It includes a number of changes and editions to the draft and many worthy additions.

Identifying, locating and reviewing the relevant material has been a challenging process. Completion of this report in the time allotted was made possible by the co-operation and contributions of a vast array of private, public and industry sources. To these individuals we offer our sincere thanks.

Continued interest in this project is generating new information on an ongoing basis and we understandably cannot warrant that this report contains all of the information on the area. However we are confident that the majority of the relevant reports have been identified. Most importantly, computer discs of the final report are provided to facilitate keeping the information current.

Reading the complete text of all the literature cited was not feasible or practical, but an overview of the material still resulted in annotations for the majority of the documents.

Notwithstanding the nature of the search and examination, the entire exercise of producing this report has identified the magnitude of the quantity and diversity of information existing for the Bow-Canmore Corridor. It also indicates the extent to which information is being gathered at the present time.

We believe this report satisfies the goal of providing an information base to assist in the development of future study programs and thank you for the opportunity to participate in this process.

Respectfully submitted,
SCOPE ENVIRONMENTAL AUDITING SERVICES CORPORATION

Ronald V.Peiluck
Project Manager

# ACKNOWLEDGEMENTS

The assistance of all individuals contacted during preparation of this bibliography is gratefully appreciated. A list of those individuals, agencies, firms and public interest groups contacted is included. We include this list both in recognition of appreciation and as a useful directory of important contacts for additional information. Our sincere apologies to any individuals whom we may have contacted but failed to include on this list. Special thanks goes to Fred Schulte, Director Environmental Assessment Division, Alberta Environment, Myrna Tierney of Calgary Regional Planning Commission, and Barbara Danielson of Calgary Fish and Wildlife Division for excellent support in obtaining relevant materials for inclusion. Thanks also to Marian Verhesen and Bobby Williams for their undaunted efforts in typing this report.

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# INTRODUCTION

This annotated bibliography on the Bow Corridor has been assembled by the authors at the request of Alberta Environment. It represents an initial effort to review and assemble a comprehensive list of the current sources of information available for the Corridor and area.

This final report incorporates a number of additions, deletions and corrections over the initial Preliminary Draft (February, 1992). It is assumed by the authors that this Final Report is largely accurate in its presentation of references and their contents based on incorporation of the solicited feedback. However, it is acknowledged that future revisions of this bibliography may need to address suggestions for improvement not received prior to going to press.

Note that due to time constraints a number of the reference materials have no accompanying annotation, however, they are included as relevant sources of information. The majority of these documents were generated from wildlife surveys or geological investigations.

Although the majority of relevant documents are included herein, it is suggested that it would be useful to undertake regular revisions of the bibliography's contents. In this way additional relevant materials can be added as they come

available and new studies can be identified. To assist in this endeavour the records of this bibliography are being stored in computer files.

The references contained in this report encompass a wide range of subject areas. It is hoped that this will address the needs of the various readers and as a first step will help to facilitate a more integrated basis for development planning in the Corridor.

# APPROACH

The initial step in preparation of this bibliography was to contact all relevant federal, provincial and municipal government agencies, development proponents, libraries and public interest groups. Internal searches within these groups were then undertaken and relevant documents were made available for review of their contents.

Key libraries providing the bulk of the documents in this bibliography included those at Calgary Regional Planning Commission, Fish and Wildlife Division, Alberta Environment and Banff Warden Service. Reference lists and bibliographies included in the material reviewed were checked for additional literature sources related to the Bow Corridor.

In order to be as comprehensive as possible, on-line data base searches were initiated. These searches helped to readily ascertain both the quantities and types of material available.

On-line data base searches were conducted for the following reference files:

| | |
|---|---|
| GEOSCAN | Geological papers. |
| GEOREF | Geological papers. |
| BIOSIS | Biological Abstracts. |

| | |
|---|---|
| CISTI | Scientific and technical documents. |
| CODOC | Government documents. |
| DISAB | Doctoral Dissertations. |

The select key words employed in locating relevant materials from libraries and database files included the following:

| Primary Key Words | Secondary Key Words |
|---|---|
| Canmore | Dead Man's Flats |
| Canmore Corridor | Lac Des Arcs |
| Bow River | Harvie Heights |
| Bow Corridor | Three Sisters |
| Exshaw | Rundle Mountain |
| Seebe | M.D. of Bighorn No.8 |
| Wind Valley | Grassi Lakes |
| Wind Ridge | Gap Lake |
| Pigeon Mountain | Grotto Mountain |
| Eastern Slopes | Echo |
| Kananaskis | Georgetown |
| Alberta | Yamnuska |
| Bow Valley Provincial Park | |

The literature search was generally limited to the material generated from studies conducted within the Bow Corridor. However, some other relevant documents that contain more general or regional information have been included at the discretion of the authors.

The annotations in this bibliography provide a description of the contents of each document. No attempt was made to summarize the conclusions or recommendations of the reports reviewed.

The bibliography is ordered alphabetically by author (personal or corporate) with each entry assigned a number. To assist in locating relevant materials the subject index lists the numbers of references, keyed to the authors, for each subject heading. The style of citation is in general accordance with that recommended by The American Psychological Association. The American National Standards Institute Bibliography Guide (ANSI Z39. 29 - 1977) was also used in formatting.

# MONITORING PROGRAMS AND STUDIES IN PROGRESS

## Archives

A large volume of historical information on the Bow Corridor exists in several local archives. No attempt was made by the authors to review this material. Relevant archives and contacts are as follows:

| | | |
|---|---|---|
| Farley Wuth | Nakoda Institute, Morley. | 881-3949 |
| Doug Cass | Glenbow Museum Archives, Calgary. | 268-4226 |
| Don Bourdon | Whyte Museum Archives, Banff. | 762-2291 |

## Climatic Information

Environment Canada, Atmospheric Service of Calgary (Contact - Ralph Martinson (403) 295-1406) has on file climatic information gathered from a variety of monitoring stations located in the Bow Corridor area. The following list includes relevant stations and provides their periods of operation.

| Station Location | Began | Ended | Information |
|---|---|---|---|
| Bow Valley Provincial Park | 1967/05 | 1971/02 | Temp. Precip. |
| | 1971/10 | 1976/11 | Temp. Precip. |
| | 1977/05 | 1977/09 | Temp. Precip. |
| | 1978/04 | 1979/06 | Temp. Precip. |
| | 1980/04 | 1981/03 | Temp. Precip. |
| | 1988/06 | | Temp. Precip. |

**Climatic Information (continued)**

| | | | |
|---|---|---|---|
| Canmore | 1885/03 | 1885/05 | Precip. |
| | 1914/01 | 1914/12 | Temp. Precip. |
| | 1958/10 | 1958/10 | Precip. |
| Exshaw | 1928/06 | 1928/10 | Precip. |
| | 1928/10 | 1945/09 | Temp. Precip. |
| Pigeon Mountain | 1960/08 | 1960/08 | Precip. |
| | 1962/09 | 1963/11 | Precip. |
| | 1964/06 | 1964/10 | Precip. |
| | 1965/05 | 1982/10 | Temp. Precip. |

## Digital Information Systems

During the course of assembling available information on the Bow Corridor it became apparent that a vast amount of information is currently being gathered by both the private and public sectors. Much of this information is being stored in digital mapping data banks. In one particular recent Alberta Environment report Alberta Environment Thematic Systems Status Report. March 1991. 28 p., by Paul Valentine, there is included an outline of 85 thematic system data bases currently in use by the Alberta Government. See Table 1 for a list of the data bases and contacts.

It was beyond the scope of this study to assess each one of these data bases as to the availability of information on the Bow Corridor. Discussions with a number of sources indicated a lack of knowledge of the availability of digital information

outside of their own working groups. Also there seems to be differences in the type of systems being used and the methods of data collection employed.

In recognition of the need to coordinate and manage the proliferation of aerial photography and electronically digitized map information available for the Bow Valley, Alberta Tourism has initiated a recent study. Komex International Limited, Calgary has subsequently been retained to conduct a Bow-Canmore digital and photo mapping study. The study area extends from the Town of Banff to the east boundary of the Stoney Indian Reserve. Along with inventorying existing public and private digital map information, and satellite imagery and aerial photography, the study will identify issues related to existing information and its ongoing management. Recommendations with respect to future coordination, standards, maintenance, requirements and a review of GIS use trends is to be included. The final report of this study is to be completed by the end of April, 1992. For further information regarding this study contact Al McCully or Mike Boyd at Alberta Tourism (403) 427-2501.

## Table 1

## Alberta Environment
## Thematic Systems Status Report

| DATABASE | ID # | CONTACT | |
|---|---|---|---|
| Aerial Photograph Index | 1074 | Ruth Topuschak | 427-6279 |
| Alberta Diagnostic System | 1082 | Rita Stevens | 623-6761 Ext. 285 |
| Atmospheric Environment Services Climatic Data | 1000 | Ron Bothe | 427-6277 |
| Automated Records Management System | 1001 | Margaret Garfin | 427-6119 |
| Beverage Container Registration System | 1083 | Betty Teichroeb | 427-5842 |
| Bottle Depot Information System | 1002 | Betty Teichroeb | 427-5842 |
| Calgary RDA Environmentally Sensitive Area Mapping | 1003 | Lynda Webster | 422-2540 |
| Calgary Transportation / Utility Corridor Mapping | 1004 | Lynda Webster | 422-2540 |
| Coal and Oil Sands Development Operations | 1005 | Maureen O'Hara | 427-6212 |
| Coal and Oil Sales Exploration Program | 1006 | Maureen O'Hara | 427-6212 |
| Compliance & Enforcement | 1085 | Richard Dickinson | 427-5855 |
| D&O Inventory of Landslides | 1007 | John McClung | 427-6150 |
| Dam Safety Branch's Operational Files | 1008 | Vern Head | 422-1356 |
| Dam Safety Data For Dams | 1009 | Vern Head | 422-1356 |
| Deformation Survey Data | 1075 | T. Ingraham | 427-6279 |
| ENVRG3 | 1001 | Gordon Ludtke | 340-5310 |
| Earthquake Seismic Data | 1086 | Doug Bingham | 427-6188 |
| Edmonton - Devon RDA Biophysical Inventory | 1013 | Lynda Webster | 422-2540 |
| Edmonton Transportation/Utility Corridor Mapping | 1014 | Lynda Webster | 422-2540 |
| Edmonton-Fort Saskatchewan Biophysical Inventory | 1013 | Lynda Webster | 422-2540 |
| Engineering Surveys Index of Field Notes | 1073 | J. Simanovskis | 427-6279 |
| Environment Land Management System | 1015 | J. White | 427-6140 |
| Evaporation/Evapotranspiration | 1016 | Ron Bothe | 427-6277 |
| Farm Surface Water Management Program | 1017 | Larry Kuchmak | 427-6150 |
| Geotechnical Borehold Database System | 1018 | Ken Lang | 427-6150 |
| Geotechnical Design Computer Design | 1019 | Ken Lang | 427-6150 |
| Geotechnical Projects | 1020 | Ken Lang | 427-6150 |
| Geotechnical Seepage Control | 1021 | Ken Lang | 427-6150 |
| Ground Water Well Data | 1022 | Joe Marciniuk | 427-6231 |
| HEC Scour and Deposition | 1023 | Kelvin Dykema | 427-6280 |
| HEC2 Backwater Analysis | 1024 | Kevin Dykema | 427-6280 |
| Hazardous Waste Manifest System | 1025 | Roger Ambrosi | 427-6182 |
| Help End Landfill Pollution | 1026 | Tony Epp | 427-3946 |
| Horizontal and Vertical Control Data | 1076 | J. Simanovskis | 427-6279 |
| Hydrogeology Digitizing System | 1028 | Joe Marciniuk | 427-6231 |
| Hydrographic Surveys | 1072 | J. Simanovskis | 427-6279 |
| Hydrometeorological Statistical Analysis | 1029 | Ron Bothe | 427-6277 |
| Hydrometric Data Adjustment Facility | 1031 | Ron Bothe | 427-6277 |
| Hydrometric Data Base File | 1032 | Ron Bothe | 427-6277 |
| Incident Investigation Tracking System | 1034 | Mark Murray | 427-6225 |
| Industrial Incident Compliance System | 1035 | Mark Murray | 427-6225 |
| Insect Release Database | 1081 | A.S. McClay | 632-6761, Ext. 283 |
| Inspections | 1036 | Ralph Schroth | 427-5296 |

*table continues*

## Table 1. (continued)
## Alberta Environment Thematic Systems Status Report

| DATABASE | ID # | CONTACT | |
|---|---|---|---|
| Laboratory Information Management System | 1037 | Gerry Lutwick | 382-4240 |
| Letters of Authority | 1038 | Ralph Schroth | 427-5296 |
| License and Permit Index | 1039 | C. J. Beler | 181-5396 |
| Local Authority File Index | 1040 | C. J. Beler | 181-5396 |
| Management of Underground Storage Tanks | 1041 | Glenn Berry | 427-3943 |
| Miscellaneous Flows and Lake Levels | 1078 | G. Coles | 427-6279 |
| Monitoring Data DataBase | 1042 | Dennis Erickson | 427-5883 |
| Municipal Operators | 1043 | Gerald Samuel | 427-5877 |
| Oil & Gas Reclamation Certificate Record System | 1044 | Carol Turner | 427-6212 |
| Operational Reclamation Database System | 1045 | Lili Chevrier | 427-4147 |
| Permit/Licences Data Base | 1046 | Dennis Erickson | 427-5883 |
| Pesticide Container Collection Sites | 1084 | Richard Dickinson | 427-5855 |
| Pesticide Licencing System | 1047 | Richard Dickinson | 427-5855 |
| Pesticide Permitting | 1048 | Richard Dickinson | 427-5855 |
| Pipeline Information System | 1049 | Elaine Bevilacqua | 427-6323 |
| Project Drawing Filing System | 1050 | Eva Fekete | 427-6140 |
| Project Information System | 1051 | Kris Haugland | 427-6140 |
| Province-Wide Groundwater Quality Monitoring | 1027 | Yeh Moon Chae | 427-6182 |
| Referral and Approval Documentation and Tracking S | 1052 | Derald Starchuk | 422-2636 |
| Regional Files | 1053 | Ralph Schroth | 427-5296 |
| Research Watershed Data | 1054 | F. Davies | 427-6277 |
| River Engineering General Operations | 1055 | Jim Choles | 427-6279 |
| River Engineering Ice Program | 1056 | Jim Choles | 427-6280 |
| Sand and Gravel System | 1057 | Howard Slavinski | 427-6323 |
| Sediment Transport | 1058 | Kelvin Dykema | 427-6280 |
| Snow Survey Data | 1079 | G. Coles | 427-6279 |
| Surficial Drainage boundaries | 1059 | Ron Bothe | 427-6277 |
| Surveys | 1060 | Larry Kuchmak | 427-5296 |
| Topographic Mapping | 1077 | J. Simanovskis | 427-6279 |
| Turtle Mountain Weather Station Data | 1987 | Doug Bingham | 427-6188 |
| Water Analysis Branch LIMS | 1080 | Lorne Goodwin | 632-6761, Ext. 266 |
| Water Availability for Licencing | 1061 | Ron Bothe | 427-6255 |
| Water Permits | 1062 | Stephen Yeung | 427-6241 |
| Water Quality Data Management | 1063 | Ron Tchir | 427-5893 |
| Water Resources Act Approvals | 1064 | Ralph Schroth | 427-5296 |
| Water Resources Data Acquisition System | 1071 | Bill Kuhnke | 427-6278 |
| Water Resources Information. Groundwater Data | 1065 | Joe Marciniuk | 427-6231 |
| Water Rights Information System | 1066 | Stephen Yeung | 427-6241 |
| Water Supplies Assistance Program | 1067 | Peter Watson | 427-6251 |
| Water Use Information System | 1068 | Joe Lennon | 427-2375 |
| Wellsite Information System | 1069 | Carol Turner | 427-6212 |
| Word Processing and Office Automation | 1070 | Kelvin Dykema | 427-6280 |

## Dust Control

The M.D. of Bighorn has retained the services of Environmental Management Associates Limited, Calgary, to generate environmental information required to assess dust control alternatives for Lac Des Arcs. This study is to be completed by the end of 1992.

## Engineering Projects

CICON Engineering. 1991. Draft Report on water and sewage for Alpine Resort Haven. Unpublished report prepared for Alpine Resort. 14 p. Appendix. Construction of this project is in progress with approximately 50 % being completed. This report includes an inventory and assessment of existing infrastructure together with recommendations to complete the final phase.

## Fisheries Studies

Brewin, M. Kerry. 1992. (In preparation.) Reproductive ecology of brown trout (*Salmo trutta*) in Alberta's upper Bow River and tributaries. Master of Science Thesis preparation, University of Alberta, Edmonton, AB.

A three year study of brown trout spawning activity in the upper Bow River system between Bow Falls and the Seebe Dam. The research concentrated on brown trout spawning migrations through Bill Griffiths Creek during 1988, 1989 and 1990. Areas of research included: timing and patterns of the spawning

migrations with respect to sex, fork length, previous spawnings and environmental factors; occurrence and benefits of alternate year spawning; validity of redds counts to assess spawning activity; incidence of *Saprolegnia* infection among spawning brown trout and the effects of tagging and handling on the occurrence of infection; differential losses of floy anchor tags between sexes and tag sizes; and a sexual dimorphism in the adipose fin.

Brewin, M. Kerry; Stebbins, Lucius L.; Nelson, Joseph S. (In press.) Differential loss of spaghetti floy anchor (Dennison) tags in spawning brown trout (*Salmo trutta*). North American Journal of Fisheries Management. (Submitted: January 1992.)

A three year field study conducted in Bill Griffiths Creek, a tributary of the upper Bow River, during the 1988, 1989 and 1990 brown trout spawning seasons determined rates of tag loss between female and male brown trout.

Brewin, M. Kerry; Stebbins, Lucius L.; Nelson, Joseph S. (In preparation.) Sexual dimorphism of the adipose fin among brown trout (*Salmo trutta*). To be submitted in March 1992 to the Transactions of the American Fisheries Society.

Sexual dimorphisms of brown trout are observed in spawning populations from Bill Griffiths Creek, a tributary of the upper Bow River near Canmore and in a

non-spawning population from Barrier Lake in the Kananaskis River system are described.

Brewin, M. Kerry. (In press.) An annotated bibliography and literature review on the potential impacts of golf course construction/development on aquatic environments. Prep. for Trout Unlimited Canada and the Alberta Environment Research Trust Fund.

Approximately 130 references directly related to the potential impacts of golf course construction and maintenance impacts on the aquatic environment are contained in this annotated bibliography and literature review. Subject and author indexes are also included. Although this publication was not written specifically with the development issues facing the Bow Corridor it provides useful information concerning golf course construction and maintenance impacts on the aquatic environment.

RL& L Consultant Limited, Edmonton. (In preparation.) Twelve month creel survey on the upper Bow River, 1991-92. In preparation for Alberta Forestry, Lands and Wildlife, Fish and Wildlife Division, Calgary. (To be available in late 1992.)

## General Municipal Plans

**Town of Canmore**

The Town of Canmore has retained the services of IBI Group to prepare the General Municipal Plan. IBI Group has retained Environmental Management Associates Limited to address the environmental aspects of the plan. Focus of the work is to identify the environmentally sensitive areas such as wildlife corridors as a basis for designating land use zones and boundaries.

## Parks and Natural Areas

**Bow Valley Provincial Park**

Bow Valley Provincial Park has conducted a variety of flora and fauna inventories and studies. These include inventories of birds, elk, long-toed salamander and other wildlife. A recent four to five year elk study involved approximately eleven radio-telemetry collared individuals which provided information on seasonal movements and habitat use. Various aspects of long-toed salamander ecology have also been studied. For more information on inventories, studies and wildlife observation records for the Park contact Paul Vidalin - Resource Management Coordinator (403) 673-3663.

**Canmore Flats Natural Area**

Alberta Forestry, Lands and Wildlife. (In preparation.) A Management Plan for the Canmore Flats Natural Area. Draft report. Alberta Forestry, Lands and Wildlife, Natural and Protected Areas Section. 29 p.

This draft document gives a brief overview of Canmore Flats Natural Area's biophysical resources, land use and administrative history. The Management Issues and Strategies section addresses conservation (biological and physical components), education and research, recreation, resource extraction and other issues. Also discussed are Program Support infrastructure and Administration of the Natural Area.

## Population Related Statistics

A vast amount of population related statistical data for the study area has been generated and/or compiled by Statistics Canada, Alberta Bureau of Statistics, Calgary Regional Planning Commission, relevant municipalities and a variety of other provincial government departments. Included in the bibliography are some of the more recent census reports available. However, the reader is encouraged to contact the aforementioned agencies for additional information.

## Recreation

Alberta Tourism is providing project funding and co-ordination for a study titled Bow-Canmore Recreation Trails Study. They are being assisted by a steering committee with representation from the Town of Canmore, M.D. of Bighorn, and Public Lands Division of Alberta Forestry, Lands and Wildlife. An advisory group will be formed to assist in the review of the draft findings.

The study area includes the Bow Valley between Banff National Park and the Stoney Indian Reserve. A wide variety of trail related information is being inventoried and digitized into a digital data base. Existing and potential trails together with points of interest are being classified, assessed, and ranked. Trail use is being documented. Existing and potential land use conflicts, safety/liability issues, impacts and use conflicts are being identified. An assessment of linkages is included. There will be two open house/work shops.

Yonge C.J. (1990-1993). Research Project. A quaternary Study of Rats Nest Cave, Alberta: Implications for regional climatic change. Application and two progress reports (1991,1992) to the Alberta Environment Research Trust.

## Tourism

Coopers and Lybrand Consulting Group Limited. (In preparation.) Rocky Mountain National Parks Utilization Study, Stage II. (*Volumes as listed below.*)* Prepared for Alberta Tourism by the authors, Calgary and Edmonton offices, AB. (*Approximate pagination for each volume is given below.*)

Volume 1. Regional Overview: Tourism products and marketing opportunities. 135 p.

Volume 2. Banff National Park Area: Tourism products and marketing opportunities. 115 p.

Volume 3. Jasper National Park Area: Tourism products and marketing opportunities. 115 p.

Volume 4. Yoho National Park Area: Tourism products and marketing opportunities. 100 p.

Volume 5. Kootenay National Park Area: Tourism products and marketing opportunities. 100 p.

Volume 6. Background report. 330 p.

Stage I of this study was initiated in 1987 and completed in 1988 (see Ruston/Tomany & Associates Limited, 1989). The emphasis of Stage II will be placed on the following aspects:

1) assess the existing tourism product and marketing initiatives,
2) identify emerging markets and product opportunities,
3) match product opportunities with future markets,
4) outline product and market strategies,
5) provide a product development and marketing plan.

This phase of the study will be concentrated on ascertaining the private sector tourism industry perspective and implementable actions. Opportunities for more integrated relationships with Canadian Parks Service initiatives, and those of adjacent "gateway" areas such as the Bow-Canmore and Kananaskis Country are to be addressed. Stage II reports are expected to be completed by mid 1992.

## Transportation

Information being gathered on an ongoing basis, by Alberta Transportation and Utilities, Planning Division includes the following:

1) Traffic counts, identification and analysis.

2) Accident and collision statistics

3) Municipal funding for utilities and road infrastructure.

5) Road and pavement condition ratings

6) Maintenance and operations costs.

## Utility Studies

Environmental Management Associates Limited have been retained by Canadian Western Natural Gas Company Limited to conduct a route location study from Seebe to Banff. A first level field program has been initiated to identify the most appropriate routing. The next phase will include more focused field studies in areas involving fisheries and wildlife resources.

# Water Resources

## Water Quality

### Bow River Water Quality Network

The scope of water quality data collection programs on the Bow River has varied considerably over the last forty years depending on particular issues being addressed. The earliest recorded surveys of the Bow River and its tributaries were conducted immediately after World War II by Dr. R.B. Miller of the University of Alberta and were designed primarily to assess fisheries habitat conditions. More recently synoptic surveys have been conducted throughout the length of the basin from above Lake Louise to near the mouth.

Currently, water quality information is stored on the NAQUADAT database system and the complete record is available upon request [Alberta Contact Person - Dave Asquin, (403) 427-5893]. Note that some information prior to 1970 may not be on the system and only available as hard copy (see the Bibliography for listings). Also note that Environment Canada has maintained a number of independent stations on the Bow River, and such data should be requested through the Water Quality Branch of that agency [Environment Canada contact person - Howard Block, (403) 292-5320]. A list of stations and time of survey is included below. In addition, Alberta Environment has also assembled a substantial database describing the benthic invertebrate community in the Bow River.

The current monitoring efforts on the Bow River consist of three programs. A long-term monitoring network at 3 sites (Cochrane, Carseland, Ronalane Bridge) provides monthly data on a wide range of variables including major ions, nutrients, and bacteria. Quarterly data for metals and pesticides is also collected.

A second monitoring program, conducted during May to October each year, provides detailed information on parameters related to sewage discharges. Data are collected for water (nutrients, metals, bacteria, major ions, priority pollutants), sediments (nutrients, metals), and plant growth (algae, macrophytes).

A third program was put in place in late 1989 to monitor the specific effects of the Domtar Calgary creosote problem.

Environment Canada Water Quality Stations

1. Bow River about 2.8 miles above Canmore below southeast boundary of Banff National Park, Alberta. Monitoring period from June 20, 1973 to January 6, 1987.
2. Bow River at Banff, Alberta. Monitoring period from May 29, 1964 to May 31, 1974.
3. Bow River at Eisenhower Junction, Banff National Park, Alberta. Monitoring period from June 11, 1973 to February 13, 1976.
4. Bow River at Highway 1 upstream of Banff, Banff National Park, Alberta. Monitoring period August 24, 1972 to February 14, 1976.
5. Bow River near Seebe, Alberta. Monitoring period from July 12, 1971 to February 25, 1974.

6. Bow River below Bow Falls and upstream of Spray River Golf Course study site #1. Monitoring period from August 2, 1990 to October 20, 1990.

7. Bow River at Banff Springs maintenance area golf course study site #2. Monitoring from August 2, 1990 to October 20, 1990.

8. Bow River at Banff Springs golf course club house study site #3. Monitoring period from August 2, 1990 to October 20, 1990.

9. Bow River at eastern edge of Banff Springs Golf Course golf course study site #4. Monitoring on August 22, 1990 only.

10. Bow River upstream of Banff Sewage discharge golf course study site #5. Monitoring from August 22, 1990 only.

11. Bow River downstream of Banff Sewage discharge golf course study site #6. Monitoring on August 22, 1990 only.

12. Bow River below Brewster Creek. Monitoring from July 14, 1980 to August 31, 1981.

13. Bow River at Five mile Bridge. Monitoring on September 15, 1973 only.

14. Bow River at Banff Bridge. Monitoring from May 4, 1970 to July 21, 1973.

15. Bow River at Canmore. Monitoring from May 2 1973 to September 3, 1974.

16. Bow River near Morley. Monitoring from July 14, 1980 to September 25, 1985.

Bow Corridor Water Quality Sampling

This Alberta Environment program was implemented on August 1991 and is designed to provide baseline data to assess the following: (1) impact of increased waste water discharge from Canmore, or the proposed new plant at Deadman's Flats, related to recreational development; (2) some of the effects of golf course development; (3) impacts of current industrial discharge from the cement plant at

Exshaw. This program should provide sufficient data to model some of the effects of expanded waste water discharge to this reach.

At present, water quality data are collected monthly upstream from Canmore by Environment Canada and at the LTRN site at Cochrane. Only four samples (all from left bank sites) were collected from this reach (sites 1, 2, 4; in Figure 1) in October 1987 and tested for a limited number of variables. Right and left bank composites at all locations are to be sampled to test for differences within the Canmore mixing zone, potential (not documented) seepage from aerated lagoons at Deadman's Flats and Exshaw, and industrial discharge to Exshaw Creek. The Canmore sewage treatment plant (STP) is currently sampled twice a year.

The sampling program discussed above is outlined in the attached Table 2. Locations for the sampling and data recording are illustrated in Figure 1. The datasonde (D) is being gathered on a hourly basis and is linked to a computer data bank. The information gathered from this sensing unit includes dissolved oxygen, temperature, pH and conductivity. Capital and manpower have been budgeted to continue the entire program through spring breakup.

**Table 2**

## Bow Canmore Corridor
## Water Quality Sampling Summary

| Variable Group | Number of Sites | Time Period | Comments |
|---|---|---|---|
| G,N,M,B,HL,E. Ph | 5 | Aug., Oct. 1991 Jan. 1992 | right and left bank composites except E, B analysis of G,N,M at Chemex; standard QA/QC |
| G,N,M,B | 1 | Aug., Oct. 1991 Jan. 1992 | Canmore STP effluent, 24 h automated composite by plant operators, AEC |
| D | 2 | Aug., Oct. 1991 Jan. 1992 | one week installation |

G calcium, magnesium, sodium, potassium, chloride, sulphate, carbonate, bicarbonate, fluoride, phenols, total alkalinity, total hardness, TOC, DOC, COD, BOD (5 day), TFR, NFR, turbidity
N total phosphorus, total dissolved phosphorus, ammonia, TKN, nitrite/nitrate, silica
M iron, lead, manganese, total mercury, zinc
B total and fecal coliforms
E epilithic chlorophyll a, template method, as late as ice conditions allow
D datasonde
Ph phytoplankton chlorophyll a

## Figure 1*

## Sampling Sites and Variable Groups in Bow Canmore Corridor Study

| Distance from Site 1 (km) | Sampling Sites (G,N,M,B,HL,E) | Additional Variables | Effluents |
|---|---|---|---|
| 0 | Site 1 Canmore u/s STP | D (at town bridge) | |
| 1.6 | ---------- | ---------- | Canmore STP |
| 4.4 | Site 2 HW 1 Bridge | D | |
| 11.4 | Site 3 Deadman's Flats | D u/s Lac des Arc | |
| 20.1 | Site 4 Exshaw d/s Lac des Arc | | |
| 28.6 | Site 5 Bow Valley Provincial Park | | |

* Refer to accompanying illustrated Figure 1.

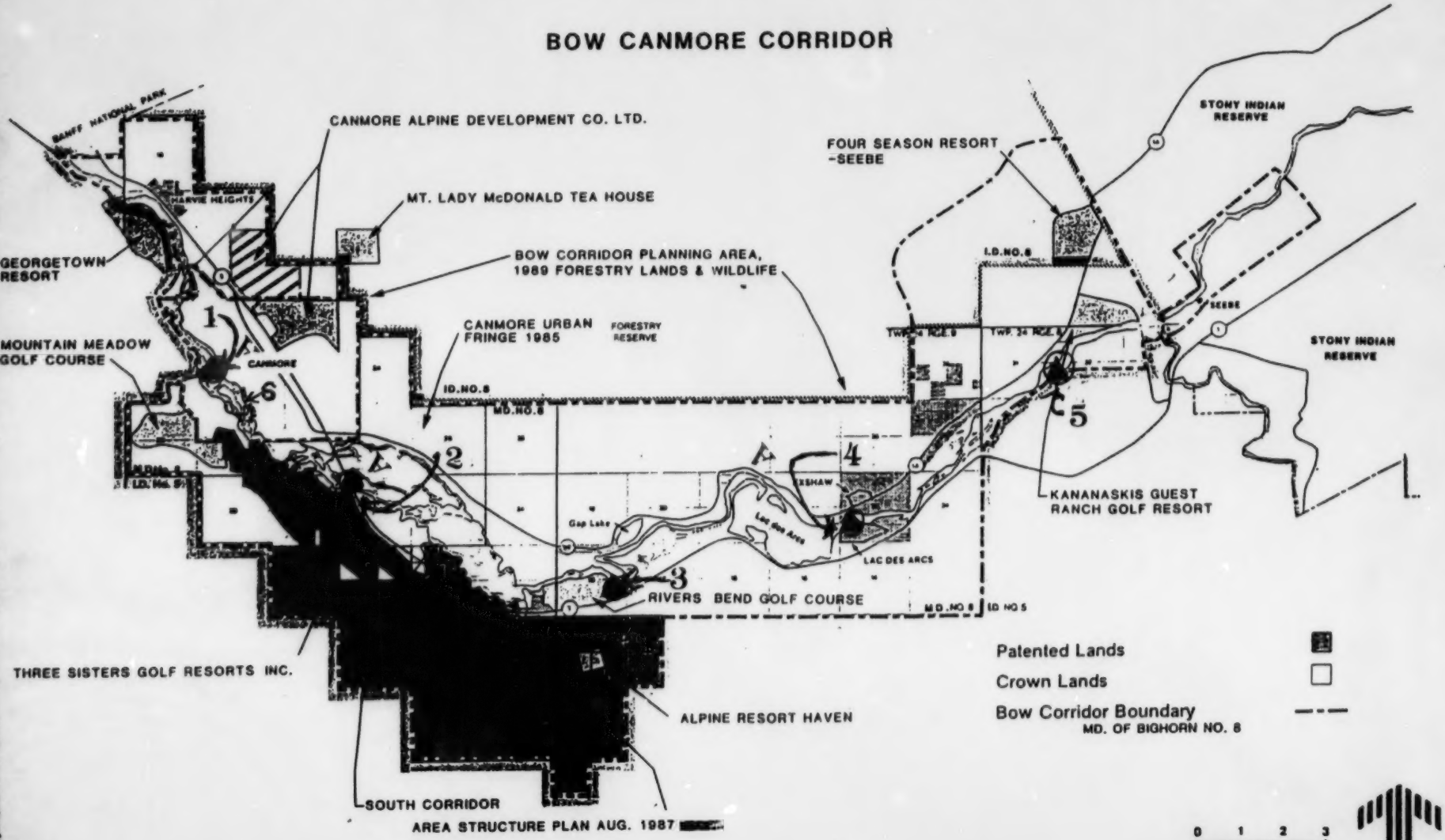
BOW CANMORE CORRIDOR
BANFF NATIONAL PARK
CANMORE ALPINE DEVELOPMENT CO. LTD.
HARVIE HEIGHTS
MT. LADY McDONALD TEA HOUSE
GEORGETOWN RESORT
BOW CORRIDOR PLANNING AREA, 1989 FORESTRY LANDS & WILDLIFE
CANMORE URBAN FRINGE 1985
FORESTRY RESERVE
MOUNTAIN MEADOW GOLF COURSE
CANMORE
I.D.NO.8
M.D.NO.8
1
2
3
4
5
6
FOUR SEASON RESORT -SEEBE
STONY INDIAN RESERVE
I.D.NO.6
SEEBE
TWP. 24 RGE. 6
KANANASKIS GUEST RANCH GOLF RESORT
RESHAW
Gap Lake
LAC DES ARCS
RIVERS BEND GOLF COURSE
M.D.NO.5
I.D.NO.5
THREE SISTERS GOLF RESORTS INC.
ALPINE RESORT HAVEN
SOUTH CORRIDOR
AREA STRUCTURE PLAN AUG. 1987
Patented Lands
Crown Lands
Bow Corridor Boundary
MD. OF BIGHORN NO. 8
0 1 2 3
Kilometres
MAY 23, 1990
SAMPLING SITES
DATASONDE
SEWAGE TREATMENT PLANT

FIGURE 1.

**Water Quantity**

Snow Survey Data

Information on snow data accumulation and water equivalency for the Bow Corridor area was managed by Water Survey of Canada up until the mid 1970s. Copies of these reports are available from Milt Spitzer of Water Survey of Canada at (403) 292-5317. Currently snow survey information is collected and compiled by Alberta Environment, River Forecast Centre, Edmonton (Contact Dave Graham, (403) 427-6278).

Surface Water and Sediment Data

Surface Water Data have been published in a variety of formats in imperial units since 1908 in approximately 300 publications which are now mostly out-of-print. Commencing with the 1979 publications, data are presented in the International System of Units (SI). Included are data for Alberta, and the Bow Corridor area, published annually on a calendar-year basis and the stations are listed alphabetically, with two years of data per page.

The first edition of a Surface Water Data Reference Index was published for data to 1966 by province or region. Subsequent editions were published annually or biennially in one publication for Canada. Coloured maps showing the locations of both active and the discontinued stations were included in the first and second

editions and were provided in a separate Hydrometric Map Supplement to the 1972 and the 1977 editions.

The first edition of a publication series titled Historical Streamflow Summary was produced for data to 1970. Subsequent editions have been published every three years. This publication series contains a summary of historical monthly and annual mean discharges and annual extremes for the entire period of record for all stations where streamflow data have been collected during the history of the Water Survey of Canada, including for Alberta.

The first edition of a publication series titled Historical Water Levels Summary was produced for data to 1976. This publication series contains a summary of historical monthly and annual mean water levels and annual extremes for the period of record for all stations on lakes or reservoirs where water level data have been collected during the history of the Water Survey of Canada. It also contains a summary of water level data for all stations on rivers where "water levels only" were collected or for certain stations on rivers where streamflow data are collected.

Sediment data for the Bow River is also available from Water Survey of Canada. However, the majority of this information was collected from sites well downstream of the Corridor.

To locate information on the water quantity data referred to above contact Milt Spitzer at (403) 292-5317.

## Wildlife Aerial Surveys

Aerial surveys have been flown in the Bow Corridor by the Alberta Fish and Wildlife Division and by the Banff Warden Service. A number of these are included in the bibliography. Ungulate surveys continue to be flown on a semi-regular basis. Information collected on these investigations generally includes the following:

- number of animals observed
- specific geographical location of the animals observed
- age and sex class of each animal when possible
- similar information on incidental species observed
- mapping of the survey's flight route

Most aerial surveys are conducted for one species per survey and include bighorn sheep, elk, moose, and deer. Note that on the majority of past surveys the flight plan only included a portion of the Bow Corridor. Several goat surveys are included, for incidental observation value, although it is understood that these surveys generally were conducted outside of the Corridor area.

Only a portion of the referenced wildlife aerial surveys are provided in annotated format in this bibliography. However, citations are included for the majority of relevant flights. Note that the bulk of this information is in unpublished format and is intended for **internal use only**.

# MAPS AND AIR PHOTOS

## Provincial Aerial Photography

Provincial aerial photography, for the Bow Corridor, is available from MAPS Alberta outlets and include the following:

1991, 1:10,000 Colour Photography (**)
1988, 1:40,000 Black and White
1987, 1:20,000 Black and White
1987, 1:20,000 Colour IR
1984, 1:20,000 Colour Negatives
1984, 1:20,000 Colour Negatives
1981, 1:10,000 Panchromatic
1978, 1:15,000 Panchromatic
1975, 1:12,000 Panchromatic
1975, 1:24,000 Panchromatic
1974, 1:12,000 Panchromatic
1973, 1:24,000 Panchromatic
1971, No index identified

## Provincial and CLI Maps

Map products available in addition to planning reports include the following:

| | |
|---|---|
| Provincial Forest (cartopographical) maps | (1:190,080 scale) |
| Provincial Map Series - Forest Cover | (1:100,000 scale) |
| Forest Inventory Maps - Phase 3 | (various scales) |
| Land Classification Studies | |
| Ecological Maps (Canmore Corridor)** | (1:100,000 scale) |
| Physical Maps (Canmore Corridor)** | (1:250,000 scale) |
| Ghost/Waiparious (PLC Maps; part of Corridor) | (1:50,000 scale) |

Proposed Yamnuska Natural Area
Biophysical Inventory report map (1989)** (1:20,000 scale)

Canada Land Inventory (CLI) Map Series (various scales)
Land Capability for Agriculture (1961-77)
Land Capability for Forestry (1961-77)
Land Capability for Outdoor Recreation (1961-77)
Land Capability for Sport Fish (1961-77)
Land Capability for Ungulates (1961-77)
Land Capability for Waterfowl (1961-77)

** NOTE: May not be available at this time.

Most maps are available from:

Information Centre, Alberta Energy/Forestry Lands and Wildlife, Calgary, AB
(403) 297-7389
or
Maps Alberta, Land Information Services Division, Alberta Forestry, Lands and Wildlife, Edmonton.
(403) 427-3520

## Federal Aerial Photographs and Geological Maps

Federal airphotos and geological survey maps are available from:

Energy, Mines and Resources, Canada
Geological Survey of Canada
Maps and Publications
Calgary, AB
T2L 2A7
Bus. (403) 292-7030
Fax (403) 299-3542

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| Timothy Yip | Alberta Municipal Affairs, Edmonton. |

## CAUTIONARY NOTE

A large portion of the items referenced in this bibliography are unpublished and may not be freely available due to limited circulation or their internal nature. Readers are advised to first consult local libraries to obtain copies of the items referenced. Please be aware that certain references included in this bibliography have copyright status and cannot be cited without first obtaining written permission from the author.

Prior to citing unpublished Fish and Wildlife materials, permission must be obtained from the Fish and Wildlife Division. **Note that certain Fish and Wildlife reports and file information may not be available at this time due to their preliminary status**. Published Fish and Wildlife reports are available through the Alberta Forestry, Lands and Wildlife, Information Centres located in Calgary (403) 297-6324 and Edmonton (403) 427-3590.

# BIBLIOGRAPHY


1. Alberta Department of Business Development and Tourism. 1977. Community Survey: Bow Island; Bowden; Brooks; Camrose; Canmore; Cardston; Carstairs. Alberta Department of Business Development and Tourism, Edmonton.

2. Alberta Department of Lands and Forests. 1973. The Foothills Resource Allocation Study. Bow Drainage District. Phase 1. Edmonton, AB: Author. 28 p.

   This report is part of a four-phased program to develop a land use plan for the Eastern Slopes. Based on an evaluation of the Canada Land Inventory studies the lands of the Bow Corridor are rated for resource use capabilities.

3. Alberta Education. 1986. The Bow Corridor/Ranchlands school boundary review. Alberta Education and Alberta Municipal Affairs. 27 p. Appendices.

   This document concerns the analysis of demographics, finances and other factors related to evaluating educational facility needs for the Bow Corridor and area.

4. Alberta Energy and Natural Resources. 1977. A Policy for Resource Management of the Eastern Slopes. Preliminary Report. Edmonton, AB: Alberta Energy and Natural Resources. 13 p. Appendix.

   A preliminary report on proposed resource management policy for the Eastern Slopes including land use designations for various proposed land use zone types.

5. Alberta Energy and Natural Resources. 1979. Canmore Corridor Integrated Land Management Plan. Alberta Energy and Natural Resources, Resource Planning Branch, Edmonton.

6. Alberta Energy and Natural Resource. 1984. A Policy for Resource Management of the Eastern Slopes. Revised 1984. Edmonton, AB: Author. 20 p.

   A revised version of the 1977 Policy for Resource Management of the Eastern Slopes. Includes proposed methods of implementation for the policy statements and regional plan.

7. Alberta Energy and Natural Resources. 1984. Kananaskis Country Equestrian Master Plan. Alberta Energy and Natural Resources, Forest Service. 138 p. Appendices and map.

A comprehensive Equestrian Master Plan for Kananaskis Country including reference to the Bow Corridor. Contains a review of policies and guidelines, trail inventory, analysis of demand, a review of program objectives, and a review of environmental and land use considerations. Also provided are management options and recommendations and an evaluation of commercial equestrian services.

8. Alberta Environment. 1972. Environmental Impact statement for provincial primary highway No. 40. Prepared for Departments of Highways and Transport and Department of Lands and Forests. 23 p.

Represents a summation of reports and studies on the effects of an improved road on the environment of the Kananaskis Valley and adjacent Bow Corridor.

9. Alberta Environment. 1976. Regional rivers perspective, Calgary region inventory. Prepared for Southern Alberta Recreation Enhancement Study Steering Committee by the Alberta Environment, Planning Division. 9 p. Appendices and maps.

A large inventory volume of resource data collected for various southern Alberta Rivers including the Bow River through the Bow Corridor. Information contained includes flow characteristics, topography, land use, land ownership, various resource potentials (based on Canada Land Inventory data), vegetation, physical access and geology for each river reach. Also provided is a final classification of each reach as to recreational value based on bio-physical, cultural land use conflicts, and other factors.

10. Alberta Environment. 1971-77. Source Emissions Survey. Unpublished report. Prepared for Steel Brothers Canada Limited, Exshaw, AB. 21 p. Appendix.

Annual survey to determine particulate emission rates and concentrations.

11. Alberta Environment 1971-77. Source Emission Surveys. Unpublished report. Prepared for Canada Cement Lafarge Limited, Exshaw, Alberta. 17 p. Appendix.

Annual survey to determine particulate emission rates and concentrations.

12. Alberta Environment. 1977. Canmore Flood protection proposal, study and report. Alberta Environment, Calgary, AB. 43 p.

Included in this report is an overview of the history of flooding in Canmore and the function of the Canmore Flood Control Advisory Committee. Also provided is a review of a flood control study and a ground water study with recommendations for flood protection.

13. Alberta Environment. 1987. Water supply review and snow survey summary, 1986-1987. Edmonton, AB: Alberta Environment, Water Resources Management Services, Technical Services Division, River Forecast Centre. 56 p. Appendices.

A detailed technical report containing surface water volume information and snow accumulation data for the Canmore area.

14. Alberta Environment. 1990 Three Sister Golf Resorts Inc. proposed international destination resort Environmental Impact Assessment Terms of Reference. Alberta Environment, Edmonton. 19 p.

Terms of Reference for an EIA of Three Sisters Golf Resort's proposed development southeast of Canmore, Alberta.

15. Alberta Environment. 1991. Mountain Meadows Golf Limited. proposed Nordic Meadows Golf Course Development Environmental Impact Assessment (EIA). Terms of Reference. Edmonton, AB: Author. 5 p. Map.

Terms of Reference for the proposed Nordic Meadows Golf Course stating information required by the Government of Alberta for an EIA.

16. Alberta Environment. 1991. The Bow River preserving our lifeline. Volume 1 and 2. Prepared by the Bow River Water Quality Task Force. 194 p.

Volume One contains the main report and five appendices. Volume Two, Appendix VI consists of technical information. The Task Force was comprised of 21 members representing a broad spectrum of individual stakeholder groups throughout the Bow River Basin. This report provides an overview of existing water quality conditions and management practises within the Bow River Basin, identifies sources of pollutants, gives 33 recommendations to improve and protect river water quality, provides preliminary cost estimates and identifies the benefits of implementing these recommendations.

17. Alberta Environment. (Annual). Climate of Alberta. Annual publication. Edmonton, AB: Alberta Environment.

18. Alberta Fish and Wildlife Division. 1984. Status of the fish and wildlife resource in Alberta. Publication NO. 1/87. Edmonton, AB: Alberta Energy and Natural Resource, Fish and Wildlife Division.

The importance of the fish and wildlife resource in Alberta is reviewed in this report. A brief overview of the occurence and status of certain rare, endangered and regulated species is presented.

19. Alberta Fish and Wildlife Division. 1985. Unpublished file data available for water quality, fisheries habitat and fish populations occurring in Quarry Lake (Canmore Mine #3), 1985. Alberta Forestry, Lands and Wildlife, Fish and Wildlife Division, Calgary, AB.

20. Alberta Fish and Wildlife Division. 1986. Unpublished file data available for water quality, fisheries habitat and fish populations occurring in Grassi Lakes, 1986. Alberta Forestry, Lands and Wildlife, Fish and Wildlife Division, Calgary, AB.

21. Alberta Fish and Wildlife Division. 1988. Unpublished file data on a electrofishing study of fish populations in Gap Lake. Alberta Forestry, Lands and Wildlife.

22. Alberta Fish and Wildlife Division. 1988. Fisheries input to the Bow Corridor Integrated Resource Plan. Draft Policy. Prepared by Alberta Forestry, Lands and Wildlife, Fish and Wildlife Division.

23. Alberta Fish and Wildlife Division. 1989. Unpublished file data from a Bow River electrofishing study, including the reach from Seebe to Canmore, 1988-89. Alberta Forestry, Lands and Wildlife, Fish and Wildlife Division, Calgary, AB.

24. Alberta Fish and Wildlife Division. 1989. Preliminary data was collected on the seasonal movements of four radio-collared sheep captured along Highway 1A near Exshaw. File data only. Alberta Fish and Wildlife Division, Calgary, AB.

25. Alberta Fish and Wildlife. 1989. Draft. Wildlife input to the Bow Corridor Integrated Resource Plan background paper. Unpublished report. Alberta Forestry, Lands and wildlife, Edmonton, AB. 25 p.

26. Alberta Fish and Wildlife Division. 1989-90. Preliminary data collected on elk seasonal movements through radio-collaring of a few individuals on the Three Sister property. File data only. Alberta Fish and Wildlife Division, Calgary, AB.

27. Alberta Fish and Wildlife Division. 1990. Management plan for grizzly bears in Alberta. Wildlife Management planning series, Number 2. Edmonton, AB: Alberta Forestry, Lands and Wildlife, Fish and Wildlife Division. 164 p.

In this document grizzly bear biology, ecology, population status and structure, and mortality are summarized for Alberta. Provincial management policies, goals, objectives and strategies for grizzly bear management are presented. Some information contained in this document applies directly to the Corridor area while other information may be useful in understanding issues related to the grizzly bear.

28. Alberta Forest Service. 1991. Field guide to forest ecosystems of southwestern Alberta. First approximation. Alberta Forestry, Lands and Wildlife, Forest service, Edmonton, AB.

This preliminary technical guide is designed to facilitate site level ecological classification of forest types. The classification system is based on climatic and biophysical characteristics of the site. Forest capabilities and management considerations are included for each site type. This guide contains useful soil and vegetation information applicable to the Corridor.

29. Alberta Forestry. 1986. Kananaskis Country Sub-Regional Integrated Resource Plan. Edmonton, AB: Alberta Forestry, Resource Evaluation and Planning Division. 98 p. Map.

While this report pertains to the lands immediately south of the Bow Corridor it does contain certain relevant information concerning the Corridor. Particular resource management policies and guidelines for Kananaskis Country may have direct or indirect effects on the Corridors resources. An example would be large mammal management for the Wind Creek and Pigeon Creek drainages.

30. Alberta Forestry, Lands and Wildlife. 1987 - , Annual. Kananaskis Country Sub-Regional Integrated Resource Plan. Annual Report. Edmonton, AB: Author. 18 p.

This report is an annual summary of progress made in implementing the Kananaskis Country Sub-Regional Integrated Resource Plan. Included is a review of ongoing, and proposed projects, management intents and actions.

31. Alberta Forestry, Lands and Wildlife. 1988. Integrated resource inventory and evaluations of the Bow Corridor integrated resource planning area. Pub. No. T/184. Edmonton, AB: Land Information Branch.

32. Alberta Forestry, Lands and Wildlife, 1989. A management plan for mule deer in Alberta. Wildlife Management Planning Series, Number 1. Edmonton, AB: Alberta Forestry, Lands and Wildlife, Fish and Wildlife Division. 121 p. Appendices.

This report reviews the biology, ecology and status of mule deer in Alberta. Including is information regarding wildlife management Unit 410 in the Bow Corridor. Management objectives and strategies are presented along with proposed application of the mule deer management plan.

33. Alberta Forestry, Lands and Wildlife. 1990. Bow Corridor Local Integrated Resource Plan. Draft plan. Edmonton, AB: Author. 53 p. Appendix.

A draft planning document which outlines the Province's resource management policy for public lands and resources within the Bow Corridor. Includes management objectives and guidelines for the area's biophysical resources, cultural resources, urban settlements, and tourism/recreation related facilities and services.

34. Alberta Forestry, Lands and Wildlife. 1990. Wildlife input to the Bow corridor integrated resource plan, Draft report. Alberta Forestry, Lands and Wildlife, Edmonton, AB. 26 p. Maps.

35. Alberta Forestry Lands and Wildlife. 1991. Management plan for wolves in Alberta. Wildlife Management Planning Series Number 4. Edmonton, AB: Forestry, Land and Wildlife, Fish and Wildlife Division.

This plan outlines the goals, objectives and management strategies for the management of wolves in Alberta. It includes a historical perspective on wolves, a review of wolf biology, ecology and population status. Information contained in this report although not specific to the Bow Corridor may be in useful in understanding the needs of wolf populations in the Corridor area.

36. Alberta Forestry Lands and Wildlife. 1992. Bow Corridor local integrated resource plan. Draft plan. Pub. No. I/301. Edmonton, AB: Author. 47 p.

This document pertains only to public lands and not to private or federal lands. It states the Government of Alberta's resource management policy for public lands and resources within the Bow Corridor. It is a guide for resource mangers, industry and the public with interests in the Bow Corridor. Resource potentials and opportunities are identified. The plan addresses bio-physical, cultural and economic development resources for the study area.

37. Alberta Housing Corporation. 1975. Town of Canmore Need and Demand Report for Land Development. Prepared for the Town of Canmore by Alberta Housing Corporation, Calgary, AB. 10 p. Appendices.

A report with information on Canmore's projected housing demand and recommendations for development.

38. Alberta Lands and Forests & Alberta Environment. 1973. The resources of the foothills: A choice of land use alternatives. Prepared for the Environment Conservation Authority. 43 p. Appendices.

This report provides information on natural resources of the foothills, land uses, demands on resources, and possible development strategies. Study area includes the Bow Corridor.

39. Alberta Municipal Affairs. 1981. Development in the Harvie Heights area. Prepared by the author, Edmonton, AB. 23 p. Appendices.

This report reviews planning considerations related to the approval of two commercial lot developments proposed for the Hamlet of Harvie Heights.

40. Alberta Municipal Affairs. 1985. Improvement District No. 8 Land Use Order No. 1 With Amendments to January, 1985. Office Consolidation. August 1985. Edmonton, AB: Author.

A 1985 statutory planning and policy document for Improvement District No. 8.

41. Alberta Natural and Protected Areas Program. (n.d.) Canmore Flats Natural Area File. Alberta Forestry, Lands and Wildlife, Public Lands Division, Edmonton, AB.

42. Alberta Natural Areas Program. (n.d.) Canmore flats, an Alberta Natural area. Publication No. 1/317. Edmonton, AB: Alberta Forestry, Lands and Wildlife, Public Lands Division. (Brochure only.)

43. Alberta Natural and Protected Areas Program. (n.d.) Pigeon Mountain Natural Area File. Alberta Forestry, Lands and Wildlife, Public Lands Division, Edmonton, AB.

44. Alberta Olympic Secretariat. 1984. Canmore Nordic Centre Master Development Plan, Summary Report.

45. Alberta Public Lands Division. 1980. Proposed ecological reserves and natural areas for Kananaskis Country. Unpublished report. Prepared for Kananaskis Interdepartmental Committee and Kananaskis Integrated Management Plan by Alberta Energy and Natural Resources, Public Lands Division, Land Management and Development Branch. 28 p.

Several proposed natural areas for lands within the Bow Corridor are evaluated and recommendations provided.

46. Alberta Recreation and Parks. 1980. Kananaskis Country recreation survey 1980. Preliminary results. Alberta Recreation and Parks, Research and Systems. 14 p. Appendices.

This report presents the preliminary results of a visitor survey conducted in Kananaskis country 1980, including the Bow Corridor. Visitor profiles, recreational interests, and facility use are evaluated. Visitor comments and other related information is included.

47. Alberta Recreation, Parks and Wildlife. 1976. Recreation in the Eastern Slopes. Prepared for the Inter-Departmental Planning Committee on the Eastern Slopes. Edmonton, AB: Author. 66 p.

This report discusses existing Eastern Slopes recreational facilities, demands, capabilities and requirements from a local municipal, regional and provincial context.

48. Alberta Recreation, Parks and Wildlife. 1977. A policy for recreation development of Kananaskis Country. Edmonton, AB: Author. 36 p.

A conceptual plan for orderly recreation development in Kananaskis Country including the Bow Corridor. The plan incorporates environmental considerations to ensure preservation of the area's natural resources.

49. Alberta Tourism, Parks and Recreation. 1992. Kananaskis Bibliography. (Available from Alberta Tourism, Parks and Recreation, Kananaskis Country Division, Canmore.) Digital computer file.

This comprehensive bibliography includes biophysical and socio-economic information on the Bow Corridor. At present this information is in digital computer files ( ie. D Base III).

50. Alberta Transportation. Annual, 1977 - . Traffic volume breakdown on primary, secondary, and other roads. Annual summary. Alberta Transportation, Traffic Engineering Branch, Edmonton, AB. 118 p.

This computer generated report includes yearly two way traffic volume broken into vehicle type classes for Alberta roads. Results are summarized as Average Annual Daily Traffic (AADT) and Average Summer Daily Traffic (ASDT) for specific roadway monitoring sites.

51. Alberta Transportation. Annual, 1977 - . Average Annual Daily Traffic and Average Summer Daily Traffic on primary, secondary and other roads. Alberta Transportation, Traffic Engineering Branch, Edmonton, AB.

This computer generated report summarized Average Annual Daily Traffic volumes and Average Summer Daily Traffic Volumes for Alberta roads.

52. Alberta Transportation. 1989. Traffic volume breakdown on primary, secondary and other roads, 1983-1988. Alberta Transportation, Traffic Engineering Branch, Edmonton, AB. 730 p.

This computer generated report includes yearly two way traffic volumes broken into vehicle type classes for Alberta roads, 1983-1989. Results are summarized as Average Annual Daily Traffic (AADT) and Average Summer Daily Traffic (ASDT) for specific roadway monitoring sites.

53. Alberta Wilderness Association. 1985. A critique of the 1984 Eastern Slopes Policy, and a comparison of it with the 1977 Policy, Calgary, AB: Alberta Wilderness Association.

A critique of the 1984 Eastern Slopes Policy in relation to the previous 1977 Eastern Slopes policy.

54. Anderson, R. Stewart. 1970. Limnological studies of high altitude lakes in Western Canada. Limnological studies of some lakes in the Bow River and Crowsnest Forest Reserves. VII. Canadian Wildlife Service, Calgary, AB. 31 p.

This study was conducted in areas surrounding the Bow Corridor and includes baseline information on water chemistry, zooplankton and aquatic ecology.

55. Andressen, Betty V. 1983. Planning for the social impacts of tourism, the Spray Lake resort, the Winter Olympics and Canmore. Master's Thesis, University of Waterloo, 1982, Waterloo, ON. Ottawa, ON: National Library of Canada. 3 microfiches.

56. Appleby, Edna (Hill). 1975. Canmore, the story of an era. Calgary, AB: D.W. Friesen and Sons Limited. 163 p.

A popular history account of the Town of Canmore and surrounding area from when the first explorers and missionaries visited the area to 1975. Gives a general review of industry, commerce, education, social life, facility developments and special events for the Canmore area.

57. Aresco Limited. 1990. Historic resource impact assessment: The Hyatt Regency Canmore at Banff National Park. Parts of NW 4, NE 4, SE 5 and all of SW 4, SE 4 in TP25-R10-W5M; and parts of NW 33, NE 33 in TP 24-R10-W5M. Final Report, Permit 90-112. Unpublished report. Prepared for Canmore Alpine Development Company Limited, Calgary, AB., by the author, Calgary, AB.

58. Aresco Limited. 1991. Historical resources impact assessment.Parts of LSD 1, 2, 7, and 8 of section 13-23-9-5 Kananaskis Tipi Village near Seebe, Alberta: Final Report, Permit 90-116. Unpublished report. Prepared for Sundance Lodges Limited, Claresholm, AB., by the author, Calgary, AB.

59. Argus, G. W. and D. J. White. 1978. The rare vascular plants of Alberta. Syllogeus No. 17. Ottawa, ON: National Museum of Natural Sciences.

60. Armstrong, R. F. G. 1968., The Canmore Corridor, recommended land uses. Prepared for Alberta Department of Lands and Forests by Calgary Regional Planning Commission, Calgary, AB. 119 p.

61. Associated Engineering Services Limited. 1981. Benchlands Canmore Concept Plan. Prepared for Alberta Housing Corporation, Edmonton by Associated Engineering Services Limited., Calgary, AB. 68 p. Appendices.

A broad framework for the planning and development of the Northeast Benchlands of Canmore is presented with an overview of the Bow Corridor and the Town of Canmore's present land use, demographics, transportation and utility structure. Site analysis included an overview of the site's climate, physiography, soils, vegetation, existing townsite status and identification of development constraints. The Concept Plan covers proposed land use structure, utility infrastructure, site development guidelines, cost analysis and phasing.

62. Associated Engineering Services Limited. 1981. Benchlands Canmore, Outline Plan of Area 1. Unpublished report. Prepared for Alberta Housing Corporation, Edmonton by the author, Calgary, AB. 20 p. Appendices and maps.

This report gives a brief overview of bio-physical conditions for the development area. The Outline Plan and utilities services concept is included with an outline of development phasing.

63. Associated Engineering Services Limited. 1981. Sewage disposal, Pigeon Mountain area. Pre-design Engineering study. Prepared for Alberta Municipal Affairs, Improvement District Administration by the authors, Calgary, AB. 14 p.

An overview of existing conditions, preliminary designs and cost estimates are provided regarding a proposed sewage disposal system for Pigeon Mountain.

64. Audres, D.D. 1979. Bank Protection of the Bow River at Lac Des Arcs. Alberta Environment, Technical Services Division. 26 p.

Engineering assessments of alternatives to prevent continued erosion of the right bank of the Bow River adjacent the Lac Des Arcs subdivision. The most feasible solution together with associated costs is described.

65. BA Consulting Groups Limited. 1991. Bow-Canmore Corridor transportation study (1990), Summary Report. Prepared for the Town of Canmore and Municipal District of Bighorn by the author, Calgary, AB. 34 p.

A summary report of the existing road system and traffic conditions with projections of potential traffic volumes. It includes proposed development options to meet future traffic conditions and looks at bikeway routes and standards.

66. Balcom, Rebecca J. 1985. Historical resources impact assessment: 1988 Winter Olympics. Final Report, Permit 84-63. Unpublished report. Prepared for Archaeological Survey of Alberta, Edmonton, AB. by Aresco Limited, Calgary, AB.

This historical resources impact assessment included the site of Georgetown located on the lower slopes of Mount Rundle and other areas affected by the Canmore Nordic Centre.

67. Balcom, Rebecca J. 1986. Historical resource impact mitigation: Historic site EgPu-14, 1988 Winter Olympics nordic venue: Final Report Permit 85-54. Unpublished report. Prepared for Archaeological Survey of Alberta, Edmonton, AB., by Aresco Limited, Calgary, AB.

Historic site EgPu-14 is located on the biathlon trails of the Nordic Venue at Mount Rundle.

68. Balgagus, P.; Jorgenson, J. 1987. Winter elk survey of the Eastern Slopes, Bow River to Highwood River. Alberta Fish and Wildlife Division, Calgary, AB. 31 p.

69. Balmer, Crapo & Associates Limited. 1978. Tourism development in the East Slopes, background document. Prepared for the Department of Business Development and Tourism by the author, Calgary, AB. 313 p. Appendices.

This report provides background information to assist in formulation of a tourism development plan for the Eastern Slopes. Included is an assessment of the historical and existing tourism industry, a review of government policies, and identification of tourism/recreation opportunities. Analysis of existing and potential markets, and recommendations for tourism development are presented.

70. Barton-Aschman Associates Limited. 1986. Improvement District No. 8 Transportation Study, 1985. Technical Appendix. Prepared for Alberta Municipal Affairs, Improvement District No. 8, by the authors, Calgary, AB.

The implications of incorporation for Municipal District of No. 8 in regards to transportation systems are examined in detail. Included are details and analysis of investigations into road systems, road standards, transportation issues, long-term road network systems, and maintenance considerations.

71. Barton-Aschman Associates Limited. 1986. Improvement District No. 8 Transportation Study, 1985. Summary Report. Prepared for Alberta Municipal Affairs, Improvement District No. 8, by the authors, Calgary, AB. 36 p.

In this summary report the road system and transportation issues for Improvement District No. 8 are evaluated to determine implications concerning incorporation of the said District.

72. Baxter, W.A. 1980. Geological Characteristics of Riverside Mine at Canmore, Alberta. Energy Research Program Mining Research Laboratories Report ERP/MRL. 80-70. Canada Centre for Mineral and Energy Technology.

73. Beak Associates Consulting. 1986. Lac des Arcs fish and waterfowl study. Unpublished report. Prepared for Alberta Municipal Affairs, Improvement District No. 8, Canmore, AB.

74. Beak Associates Consulting Ltd. 1990. An environmental overview of the proposed Nordic Meadows golf course development. Prepared for Mountain Meadows Golf Inc., Calgary, Alberta by the authors, Calgary, AB. 44 p. Maps.
This study requested by M.D. of Bighorn involved field studies in early September, 1990. The report provides an overview of the biophysical conditions in the area; an assessment of locally significant environmental features; an overview level review of potential environmental impacts of golf course construction and maintenance on the site; and a list of recommended mitigative measures organized within the framework of 8 priorized environmental issues.

75. Beckstead, G.; Looten, K. 1976. Flood Protection, Bow River at Canmore. Unpublished preliminary Draft. Alberta Environment. 30 p. Appendices.

76. Benfield, Richard W.; Butkovic, Brenda; Hope, Betty. 1976. Regional Lakes perspective, Calgary Region inventory. Environmental Planning Division, Alberta Environment, Edmonton, AB. 61 p. Appendices.

The main body of this report consists of a classification system for standardized inventory of lakes in the Calgary Region including the Canmore area. A lake resource classification scheme based on biophysical and cultural assessments is presented which was used to inventory lakes and shorelands in the Calgary Region. Based on analysis of the results lakes are grouped into classes for resources use management purposes.

77. Berg, Bjorne P. 1979. Range and wildlife inventory of the Wind-Pigeon - Ribbon Creek Complex, Kananaskis Country. Preliminary draft. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB. 43 p.

This draft report reviews the biophysical attributes of the Wind Ridge and Pigeon Mountain area, and identifies important habitat for birds and mammals with emphasis on ungulates.

78. Bergen, L; Looten, K. 1980. Policemans Creek Flood Control Project Phase II. As constructed. Alberta Department of the Environment, Environmental Engineering Support Services. Appendix.

This report pertains to the redesign and construction, of ice up and flood control measures initiated for Policemans Creek, in 1979.

79, Berger, R.; Van Egmond, T. D.; Green, J. E. 1990. Preliminary wildlife evaluation in the vicinity of the Three Sister's Lease, Canmore, Alberta. Progress Report. Prepared for Three Sisters Golf Resorts Inc., Calgary, by The Delta Environmental Management Group Limited., Calgary, AB. 37 p. Maps.

80. Berger, R. P. (Date unknown). Surveys of breeding songbirds, upland game birds and waterfowl in the vicinity of the Three Sisters Property, Canmore, Alberta. Draft Report. Prepared for the Three Sisters Golf Resorts Inc., Calgary, by The Delta Environmental Management Group Limited, Calgary, AB.

81. Berger, R. P. 1990. Pellet group and browse surveys in the vicinity of the Three Sisters Property, Canmore, Alberta. Draft Report. Prepared for Three Sisters Golf Resorts Inc., Calgary, by The Delta Environmental Management Group Limited., Calgary, AB. 37 p.

82. Berger, R. P.; Green, J. E. 1991. Abundance, diversity and distribution of breeding birds on the Three Sisters Property, Canmore, Alberta. Prepared for Three Sisters Resorts Inc., Calgary, by The Delta Environmental Management Group Limited, Calgary, AB. 20 p.

83. Berger, Robert P.; Green, Jeffrey E. 1991. Abundance, diversity and distribution of breeding birds on the Three Sisters Resorts' Property, Canmore, Alberta. Prepared for Three Sister Resorts Incorporated, Calgary, AB., by The Delta Environmental Management Group Limited, Calgary, AB. Various paging.

84. Bertch, B. 1988. Deer Road Survey Report. Banff National Park, Warden Service, Banff, AB. 13 p. Appendices.

This report presents the results of a 1985 and 1988 Banff National Park road survey of deer occurrence and distribution by species, sex and age class. The survey area extended to the Banff Park east gate.

85. Bietenstein, H.U.; Price, R.A.; Jones, P.B. 1991. Geology of the Seebe Kananaskis area. Alberta Society of Petroleum Geology.

86. Block, Howard; Vaughan, Hague; Zaal, Fred. 1988. An assessment of the Banff sewage lagoon and its effects on the Bow River during February 1988. Unpublished draft. Prepared by the Environmental Protection Directorate, the Water Quality Branch of the Conservation and Protection Service, and the Banff Warden Service. 16 p.

This report gives an assessment of the performance of the Banff sewage treatment plant and its impact on the Bow River water quality during the 1988 Winter Olympics.

87. Bloy, G.R.; Hunter, I.G.; Legget, S.R.; Eliuk, L.L. 1984. Depositional environments of the Devonian Cairn Formation, Rocky Mountain Front Ranges, Canmore, Alberta. In Carbonates in Subsurface and Outcrop, Canadian Society of Petroleum Geologist 1984 Core Conference, Calgary, October 18-19, 1984. Canadian Society of Petroleum and Geology, Calgary, AB., pp. 148-151.

88. Bloy, G.R.; Legget, S.R.; Hunter, I.G.; Anonymous. 1987. Depositional environments of the Upper Devonian Cairn Formation, White Man Gap, Canmore, Alberta. Canadian Society of Petroleum and Geology, Canada. 18 p. (Summary only.)

89. Bloy, Graeme R.; Legget, Sidney R.; Hunter, Ian G. 1988. The lower Fairholme reef complex (Cairn Formation). White Man Gap area, Canmore, Alberta. Institution of Sedimentary and Petroleum Geology, Canada. 13, 399-404.

90. Borneuf, D. 1980. Hydrogeology of the Kananaskis Lake Area, Alberta. Earth Sciences Report 79-4. Edmonton, AB: Alberta Research Council. 11 p. Appendix and maps.

An overview of biophysical resources of the Kananaskis area is included in this report along with details on geology and

hydrogeology. Information on ground water levels and yields is provided in mapped form.

91. Bottini, Michael. 1986. Initial effects of highway fencing and wildlife underpasses on elk movement and behaviour in Banff National Park. Master's paper, University of British Columbia, Faculty of Forestry, Vancouver, B.C. 32 p. Appendices.

    This paper examines the impact of highway fencing and wildlife underpasses on elk movement and behaviour in the Lower Bow Valley of Banff National Park.

92. Bottini, Michael. 1987. Elk roadkills on the Trans Canada Highway in Banff National Park.

    This paper examines the frequency of elk roadkills as related to traffic volume, highway fencing and highway design.

93. Bow Valley Views. 1974 - . Bow Valley Views. Serial. Canmore, AB.

94. Bow Valley Naturalists (Eds.). 1974. Yamnuska. Introductory studies of a natural area with proposals for its protection and use. Out of print. Prepared for Alberta Environment Conservation Authority. Banff, AB: Banff Centre Press.

    A preliminary assessment and inventory of the biophysical, cultural and recreational resources of the proposed Yamnuska Provincial Park area. Management recommendations are included.

95. Bow Valley Television. 1987. Bow Valley this Week. Weekly Serial Television Programs. Banff, Alberta.

96. Brewin, M. Kerry. 1992. Brown trout (*Salmo trutta*) spawning activity in the upper Bow River system, Alberta. Report submitted to the Alberta Fisheries Management Enhancement Program. Department of Biological Science, University of Lethbridge, Lethbridge, AB.

    Redd counts were used to assess spawning activity in tributaries and side channels of the upper Bow River between Bow Falls and the Seebe Dam that were known to contain habitat conditions conducive to brown trout spawning. The results of redd counts from the 1989, 1990 and 1991 spawning seasons are presented.

97. Brewin, M. Kerry; Stebbins, Lucius, L. (1992). The reproductive ecology of brown trout (*Salmo trutta*) and brook trout (*Salvelinus fontinalis*) in Alberta's upper Bow River and tributaries. Prepared for the Alberta Recreation, Parks and Wildlife Foundation and the Alberta Fisheries Enhancement Fund by University of Alberta, Department of Zoology and Department of Biological Sciences, University of Lethbridge. 130 p.

This report covers three years of research on the reproductive ecology of brown trout and brook trout in the upper Bow River system between Bow Falls and the Seebe Dam. The research concentrated on the brown trout spawning migrations through Bill Griffiths Creek during 1988, 1989 and 1990. The final report will be submitted as a M.Sc. Thesis from the Department of Zoology, University of Alberta.

98. Browne, B. 1986. Monitoring program mitigative measures, Trans Canada Highway twinning, Third Progress Report, Phase I. Environment Canada, Parks Canada, Banff National Park. 49 p.

99. Browne, B. 1987. Elk monitoring report Banff National Park 1987. Banff National Park, Warden Service, Banff. 65 p. Appendices.

The results of an annual aerial survey of elk for 1985 to 1987, inclusive, is presented along with ecosite use and mortality factors. The census area included the portion of the Bow Corridor from Canmore to the Banff Park Boundary.

Note: Annual aerial survey results are available for the Canmore west portion of the Bow Corridor from 1985 to 1991. Aerial elk surveys flown for the entire Banff Park, 1987-88 and 1991-92, included the western portion of the Bow Corridor.

100. Burns, J.A. 1989. Fossil vertebrates from Rats Nest Cave, Alberta. Canadian Caver, 21(1), 41-43.

101. Burrowes, G. (Compiler). 1982. Cambrian and Devonian Geology of the Grassi Lakes and Big Hills Area, Alberta; Field Trip Guidebook. Field Trip No. 5 Held in Conjunction with the 1982 Annual Convention of the American Association of Petroleum and Geology, Calgary, AB., June 27-30. 46 p. Maps.

102. B.W. Brooker Engineering Limited. 1984. Canmore Northeast Benchlands, Reservoir '1395' Trunk Watermains and Associated Works. Prepared for Alberta Housing Corporation. 49 p. Appendix.

Typical water distribution system engineering analysis.

103. C.L. Sibbald Agri-Business Limited. 1970. Grazing land resources, 1970. A conservative awareness probe in and adjacent to the Bow River Forest Reserve, Alberta. Prepared for the Calgary Fish and Game Association, Big Game Committee, Calgary, AB. by the author, Calgary, AB.

While this report is not specific to the Bow Corridor it does contain relevant information pertaining to the environmental impacts of grazing in the adjacent Bow River Forest Reserve area and its effects on other land uses. A review of historical and existing land use policies is included along with recommendations for future management of these lands as pertains to grazing.

104. Calder, J. M. 1982. Historical resources impact assessment "Project 75" Canmore, Alberta. Final Report. Unpublished report. Prepared for Patrician Land Corporation Limited, Calgary, AB, by Lifeways of Canada Limited, Calgary, AB.

Lands projected for residential development by Patrician Land Corporation were inventoried and assessed for potential historical resource impacts.

105. Caldwell, Cathy.; Luthy, Jean. 1985. Canmore Public Library needs assessment project, August 1985. Canmore Public Library, Canmore. 114 p.

106. Calgary Regional Planning Commission. (n.d.). A guide to area requirements for provision of modern retail outlets in Canmore. Calgary, AB: Author. 33 p.

A guide to market potential and analysis of commercial retail space requirements for Canmore.

107. Calgary Regional Planning Commission, 1965. A general plan for Canmore, 1965. Prepared by Calgary, AB: Author. 45 p.

This General Plan includes an analysis of existing physical, economic and sociological structures of the village of Canmore and proposals for future development.

108. Calgary Regional Planning Commission. 1967. The Canmore Corridor proposed land uses. Calgary, AB: Author. 27 p. Maps.

A land use planning document for the Bow Corridor.

109. Calgary Regional Planning Commission. 1969. Canmore Urban Renewal Study. Prepared for The Town of Canmore and Improvement District No. 8. Calgary, AB: Author. 147 p. Appendices.

This report gives and overview of land uses, the physical setting and economic base of Canmore with an analysis of physical and socio-economic conditions. Resultant urban renewal proposals are presented.

110. Calgary Regional Planning Commission, 1972. A General Plan for Canmore, 1972. Calgary, AB: Author. 17 p.

A general plan for the Town of Canmore including an overview of site conditions, population and employment, existing land uses, economic future, proposed land uses, facility needs and proposed implementation of the General Plan.

111. Calgary Regional Planning Commission. 1973. Land use and resource development in the Eastern Slopes, Bow River Watershed Basin. Submitted to the Environment Conservation Authority Hearings by the author, Calgary, AB. 39 p.

This submission to the Eastern Slopes hearing gives an overview of the Calgary Regional Planning Commission's function and land use planning process. A review of the land use issues related to the multiple resource use and development planning in the Eastern Slopes is included.

112. Calgary Regional Planning Commission. 1973. Land use and resource development in the Eastern Slopes Bow River Watershed Basin. Information Bulletin No. 6. Prepared for the Environment Conservation Authority, Edmonton, AB. by the author, Calgary, AB. 42 p.

This report provides background information on the Bow River Basin's biophysical resources, administration, landuse, and resource potential. Specific reference to the Bow Corridor is included.

113. Calgary Regional Planning Commission. 1974. Central places in the Calgary Region. Calgary Region Growth Study. Calgary, AB: Author. Various pages. Appendices.

This report contains basic census information related to identifying centres of commerce and associated hinterlands. Included is the Town of Canmore.

114. Calgary Regional Planning Commission. 1974. Exshaw Housing Relocation Study Site Selection Report. Calgary, AB: Author. 18 p. Appendices.

An examination of alternative housing sites for residents displaced by Canada Cement LaFarge Limited's proposed expansion at Exshaw, Alberta.

115. Calgary Regional Planning Commission. 1975. A proposed general plan study of the Canmore Corridor and the Eastern Slopes. Calgary, AB: Author. 8 p. Appendices and maps.

Preliminary planning document identifying the scope, critical study aspect, general objectives, study outlines and anticipated costs for a proposed study enabling preparation of a General Plan for the Town of Canmore and I.D. No. 8, including the Eastern Slopes.

116. Calgary Regional Planning Commission. 1975. Population: Analysis and projection. Calgary Region Growth Study. Report A.3. Calgary, AB: Author.

This document contains historical and existing statistics information pertaining to population characteristics for the Calgary Region and including the Canmore area.

117. Calgary Regional Planning Commission. 1976. Progress Report. Pilot Study, an environmental/recreational land use analysis of the Bow River-Canmore Corridor: Banff Park Gates to Morley Indian Reserve. Pages 63-69. In Task Force on Shorelands: Assessing river shorelands. Alberta Conservation and Utilization Committee. 103 p.

This progress paper discusses on going endeavours to inventory and analyze biophysical and cultural resources, in the Bow Corridor, for conceptual landuse planning purposes. Emphasis is placed on river shorelands planning as part of a province wide initiative to better manage that resource.

118. Calgary Regional Planning Commission. 1977. Citizens' Views, A public information brochure. Calgary, AB: Author. 4 p.

A summary of citizens' and groups' views on major issues in the Bow Corridor, 1977.

119. Calgary Regional Planning Commission. 1977. Canmore Corridor Study, Volume 1: Inventory and prospect, Part 1: Cultural landscape. Calgary, AB: Author. 35 p.

First report of a series of background reports on the Bow Corridor. This document summarizes the prehistoric, historic, and contemporary land and resource use patterns to assist the reader in assessing development proposals.

120. Calgary Regional Planning Commission. 1977. Canmore Corridor Study, Volume 1: Inventory and Prospect, Part 2: Physical landscape. Calgary, AB: Author. 73 p.

Second report in a series of technical publications on the Bow Corridor. Provides an inventory summary of the biophysical resource base and notes limitations and restrictions to development.

121. Calgary Regional Planning Commission, 1977. Canmore Corridor Study, Volume I, Inventory and Prospect, Part 3, Regional Demand. Calgary, AB: Author. 131 p.

The third part of an initial volume produced to assist in assessment of proposals for development in the Corridor. Examines the demand for land, facilities and services between 1977 and 1987.

122. Calgary Regional Planning Commission. 1977. Canmore Corridor Study, Volume I, Inventory and Prospect, Part 4, User preferences. Calgary, AB: Author. 77 p.

Fourth part of a first volume on the Bow Corridor and includes an inventory and analysis of user surveys and a citizen participation program. Emphasis is on the opinions and recommendations of the resident and non-resident users regarding future growth and development in the Corridor.

123. Calgary Regional Planning Commission. 1977. Canmore Corridor Study, Volume II, River shorelands pilot study. Calgary, AB: Author. 110 p.

This report recommends management policies for the conservation and utilization of the Bow River shorelands within the Bow Corridor. It gives an overview of cultural and bio-physical resources, provides recommended land use classifications, analyzes recreational demands and suggests a "recreation corridor concept" giving specific conceptual proposals.

124. Calgary Regional Planning Commission. 1977. Canmore Corridor Study, Volume III, Socio-economic characteristics, Part 1, Employment and income. Calgary, AB: Author. 54 p.

This report is the first of three reports in the third volume of the Canmore Corridor Study. It was produced to enable assessment of proposals for development and of the Corridor's income base. It includes an analysis of the interrelationships between the various sectors of the local economy. Discussion of advantages and disadvantages of operating a business in the study area is provided.

125. Calgary Regional Planning Commission. 1977. Canmore Corridor Study, Volume IV., Transportation and urban development. Calgary, AB: Author. 37 p.

Fourth volume of a series of reports providing background information enabling assessment of proposals for development of the Corridor. Reports on an analysis of the transportation and urban development patterns in the Corridor. Defines the unused capacity of the transportation system, and examines growth potential of the existing settlements.

126. Calgary Regional Planning Commission. 1977. The Canmore Corridor, Prospects and possibilities, a public information brochure. Calgary, AB: Author. 33 p.

A public review document presenting land use policies and recommendations resulting from the Canmore Corridor General Plan Study.

127. Calgary Regional Planning Commission. 1978. Canmore Corridor Study, Volume III, Socio-economic characteristics, Part 2, Population. Calgary, AB: Author. 21 p.

Second report of the third volume on the Canmore Corridor Study providing background information for use in assessing development proposals. This document analyzes population trends and characteristics in the Corridor and presents an employment-based population projection to 1987.

128. Calgary Regional Planning Commission. 1978. Canmore Corridor Study, Volume III, Socio-economic characteristics, Part 3, Community Services. Calgary, AB: Author. 34 p.

Third report of the third volume on the Canmore Corridor Study to be used for assessment of development proposals. Includes an inventory and analysis of existing community facilities and services available in the Corridor. Reviews health, education, protection, government, and community services. Includes the results of a resident opinion survey regarding services.

129. Calgary Regional Planning Commission. 1978. Town of Canmore, Commercial/industrial information package. Calgary, AB: Author. 29 p.

An overview report on Canmore's demographics and economic, industrial and commercial base. A review of existing community services and facilities, and housing availability is provided.

130. Calgary Regional Planning Commission. 1978. Urban growth and commercial space requirements. Calgary, AB: Author. 38 p.

This document includes a review, analysis and subsequent guidelines for commercial space requirements as relates to community population size.

131. Calgary Regional Planning Commission. 1979. Town of Canmore Improvement District No. 8 General Municipal Plan, 1978. Volume I of the General Municipal Plan Study. Calgary, AB: Author. 108 p.

First volume of three volumes forming the General Municipal Plan Study for the Town of Canmore and Improvement District No. 8. Volume I is a guide for land use planning and contains a statement of the goals, objectives, development policies, and design principles and criteria. It provides an overview of biophysical resources, and socio-economic and cultural landscapes.

132. Calgary Regional Planning Commission. 1979. Town of Canmore and Improvement District No. 8 Technical background: Town of Canmore, Volume III of the General Municipal Plan Study. Prepared for The Town of Canmore and Improvement District No. 8. Calgary, AB: Author. 85 p.

A detailed account of the technical basis and planning rationale supporting the Town of Canmore General Municipal Plan's policies. It offers additional discussion of guidelines and policies. Includes discussion of urban development analysis, housing, commerce, industry, transportation, open space and recreation, community facilities and utility systems.

133. Calgary Regional Planning Commission. 1979. Canmore Industrial Demand Study. Prepared for Canmore Town Council. Calgary, AB: Author. 12 p.

A brief overview of industrial and commercial space demands and associated advantages and disadvantages of the Canmore area.

134. Calgary Regional Planning Commission. 1979. Central places in the Calgary Region. Update, 1979. Calgary, AB: Author.

This update of the 1974 study also provides information on trade areas in the Calgary Region, including the Bow Corridor.

135. Calgary Regional Planning Commission. 1980. Truck Stop Location Survey, Canmore Corridor and vicinity. Prepared for I.D. No.8 Advisory Council, Calgary, AB: Author. 13 p.

An examination of concerns regarding a proposed truck stop development at Pigeon Mountain and a review of alternative locations.

136. Calgary Regional Planning Commission. 1981. 1980 Population update. Calgary, AB: Author. 80 p.

Updated population characteristics, trends and projections is presented in this document. Subject areas include demographics, housing, labour force, government policies, and projected growth figures for certain urban areas, including Canmore.

137. Calgary Regional Planning Commission. Annual 1982 - . Selected comparisons. Census results. Calgary, AB: Author. 23 p. Appendix.

An annual summary of recent census information on demographics, employment and housing for municipalities within Calgary region, including those in the Bow Corridor. Earlier statistics and more detailed information is available through the Calgary Regional Planning Commission, Calgary, AB.

138. Calgary Regional Planning Commission. 1982. Restwell Trailer Park Area Structure Plan. Calgary, AB: Author. 24 p.

The Area Structure Plan for the Restwell Trailer Park area defines specific land uses, proposes rezoning of areas from Low Density to High Density and further subdivision. Includes a review of relevant policies, provides an overview to bio-physical and cultural resources of the study area, identifies constraints to development criteria and proposes sharing of development responsibilities.

139. Calgary Regional Planning Commission. 1983. Town of Canmore, Summary of information in support of the proposed High Density Amendment, June 15, 1983. Prepared for the Town of Canmore by the author Calgary, AB. 7 p. Appendices.

Supporting document for a proposed high density amendment pertaining to lands within Canmore's corporate boundaries.

140. Calgary Regional Planning Commission. 1984. Regional Recreation Study, An examination of supply, demand, and emerging policy directions. Calgary, AB: Author. 40 p.

This document reviews existing recreational resources and demands to identify requirements for recreational developments, planning and policy updates within the Calgary region.

141. Calgary Regional Planning Commission. 1984. Study of retail and service trade, for Canmore and surrounding area. Calgary, AB: Author. 15 p. Appendix included.

An information source of retail and service trends in Canmore and area.

142. Calgary Regional Planning Commission, 1984. The Town of Canmore General Municipal Plan, 1984. Prepared for The Town of Canmore, Canmore, Alberta. Calgary, AB: Author. 20 p.

A 1984 General Municipal Plan statement for the Town of Canmore.

143. Calgary Regional Planning Commission. 1985. Town of Canmore Urban Fringe Boundary Proposal. Calgary, AB: Author. 58 p. Appendices.

Provides population projections for the Town of Canmore to the year 2044, identifies urban fringe land requirements to the year 2024 by assessing residential, commercial, industrial, and park/open space land requirements. An urban fringe boundary is proposed through evaluation of land development constraints and opportunities, physical and land use constraints, and development potential.

144. Calgary Regional Planning Commission. 1985. Town of Canmore, Downtown/Highway Commercial Area Redevelopment Plan, Background Report. Calgary, AB: Author. 201 p. Appendices.

A detailed background information report containing an inventory of existing land uses and resources, and assessment of factors affecting redevelopment. Includes recommendations for land use plans and policies to assist in formulation of a Downtown/Highway Commercial Area Redevelopment Plan for Canmore.

145. Calgary Regional Planning Commission. 1985. Improvement District No. 8 Technical Supplement for the General Municipal Plan- Part 1: Bow Corridor. Prepared for Improvement District No. 8. Calgary, AB: Author. 83 p.

A technical supplement appendix to the General Municipal Plan, 1985. Provides additional details and background information to the Plan's policies outlines.

146. Calgary Regional Planning Commission. 1985. Supporting documentation for the I.D. No. 8 Regional Plan Amendment application for the I.D. No. 8 lands within the Urban Fringe Part. Calgary, AB: Author. 66 p.

A report, generated by Improvement District No. 8 Advisory Council, which reviews fringe boundary negotiations and proposals with the Town of Canmore. It provides the Advisory Councils March 1985 boundary proposal with planning rationale and supporting documentation.

147. Calgary Regional Planning Commission. 1986. Town of Canmore, Downtown/Highway Commercial Area Redevelopment Plan. Prepared for The Town of Canmore by the author, Calgary, AB. 57 p.

A statutory document concerning land use and redevelopment objectives and policies for the downtown and highway commercial area of Canmore.

148. Calgary Regional Planning Commission. 1986. Town of Canmore Downtown - Highway Commercial Area Redevelopment Plan. Volume 3: Canmore Merchant Survey Results (May, 1985). Calgary, AB: Author. Unpaginated.

This appendix volume includes a sample business survey questionnaire with raw survey results for a variety of socio-economic concerns.

149. Calgary Regional Planning Commission. 1986. Town of Canmore Downtown/Highway Commercial Area Redevelopment Plan. Vol. 4: Public Survey Results (May 1985). Calgary, AB: Author. Unpaginated.

An appendix volume including a survey questionnaire regarding redevelopment of the downtown highway commercial areas, with results presented.

150. Calgary Regional Planning Commission. 1987. A guide to sour gas development and land use planning within the Calgary Region. Calgary, AB: Author. 86 p. Appendices.

This planning guide summarizes production related aspects of the sour gas industry, industry regulation, environmental inspection and monitoring, human health related to sour gas production and land

use planning issues and guidelines. Sour gas reserves and production facilities for the Canmore area are mapped.

151. Calgary Regional Planning Commission. 1987. Improvement District of Bighorn No. 8 South Corridor Area Structure Plan, 1987. Prepared for Improvement District of Bighorn No. 8. Calgary, AB: Author. 23 p. Appendices included.

A statutory document outlining management plan policies. Included are technical support appendices with some detailed information on important biophysical and cultural features, development potential and constraints.

152. Calgary Regional Planning Commission. 1987. I.D. of Bighorn Rural Industrial Park Feasibility and Location Study, September, 1987. Prepared for the Advisory Council of the Improvement District of Bighorn No. 8. Calgary, AB: Author. 74 p. Appendix and bibliography.

Planning report which discusses the site selection process involved in selecting rural industrial park space.

153. Calgary Regional Planning Commission, 1988. The Town of Canmore General Municipal Plan, 1988. Prepared for The Town of Canmore, Canmore, Alberta. Calgary, AB: Author. 19 p.

The 1988 consolidated General Municipal Plan for the Town of Canmore is the current statutory planning document.

154. Calgary Regional Planning Commission. 1988. Regional economic trends. Regional Planning Services, Calgary, AB: Author. 82 p. Appendices.

Included in this report is an overview of the Calgary Regional area economy, with an analysis of manufacturing, retailing, services, municipal finance and labour force characteristics. Both general and specific information pertaining to the Bow Corridor is included.

155. Calgary Regional Planning Commission. 1988. Census results, 1988. Municipal Census Program. Prepared for the Municipal District of Bighorn. Calgary, AB: Author. 82 p. Appendices.

A summary of statistics concerning demographics, employment and housing for the M.D. of Bighorn and for hamlets and settlements in the Bow Corridor.

156. Calgary Regional Planning Commission. 1988. Municipal District of Bighorn No. 8 General Municipal Plan, 1988. Calgary, AB: Author. 29 p.

This General Municipal Plan includes a summary of management policies regarding existing communities, new resort development areas, conservation areas, environmental resources, economic resources, and facility, services and transportation infrastructures in the Bow Corridor.

157. Calgary Regional Planning Commission. 1988. Regional economic trends. Household survey summary report. Calgary, AB: Author. 31 p. Appendices.

In this report survey results are summarized that identify central places, employment patterns and economic perceptions in the Calgary Region, including the Bow Corridor.

158. Calgary Regional Planning Commission. 1988. Municipal District of Bighorn technical supplement to the General Municipal Plan. Prepared for the Municipal District of Bighorn. Calgary, AB: Author. 51 p.

A technical supplement appendix specific to the Bow Corridor Part of the Improvement District No. 8 General Municipal Plan (GMP). Provides an overview of existing communities, biophysical and cultural resources, existing services and facilities, transportation systems, and present plans and policies. Details of opportunities for development/preservation of the area as outlined in the General Municipal Plan are included.

159. Calgary Regional Planning Commission. 1989. The Municipal District of Bighorn NO. 8 Land Use Bylaw No. 11 of 1988. Office Consolidation, December, 1989. Calgary, AB: Author. 103 p.

A statutory planning and policy document for the Municipal District of Bighorn No. 8, 1988.

160. Calgary Regional Planning Commission. 1989. Dead Man's Flats Area Redevelopment Plan. Prepared for the Municipal District of Bighorn No. 8. Calgary, AB: Author. 18 p. Appendices.

A plan with policies aimed at redevelopment of Dead Man's Flats commercial area.

161. Calgary Regional Planning Commission. Annual 1989 - . Prospect. Calgary, AB: Author.

A serial publication (generally annually) which provides background data on socio-economic and environmental issues related to planning for the Calgary region including the Bow Corridor.

162. Calgary Regional Planning Commission. 1990. Prospect 1990: Tourism in the next decade. Calgary, AB: Author. 30 p. Appendices.

Included in this review is an evaluation of the tourism market, competition, economic factors, and tourism demands. Although general in nature there is specific reference to the Bow Corridor situation.

163. Calgary Regional Planning Commission. 1991. Canmore. Census Results. Calgary, AB: Author. 18 p. Appendices.

This document makes available statistics on demographics, education, employment, housing and other census information for the Town of Canmore and the Bow Corridor. Earlier statistics and more detailed information is available through the Calgary Regional Planning Commission, Calgary, AB.

164. Calgary Regional Planning Commission. 1991. Canmore trails and open space plan. Prepared for the Town of Canmore by the authors, Calgary, AB. 42 p. Appendices.

A review of existing open space and trail systems within the Town of Canmore. Requirements for upgrading the trails, walkways and play lot system for residents and visitors are identified.

165. Campbell, J.D. 1967. Coal mines and coal leases, Alberta Rocky Mountains and Foothills. Report 66-5. Edmonton, AB: Research Council of Alberta. 55 p. Map.

This document lists all coal mines and most government coal leases in the Rocky Mountains and Foothills and includes data on location, geology and composition of coals.

166. Canada Land Inventory. 1971. Land Capability for wildlife-waterfowl. Ottawa, ON: Department of Regional Economic Expansion. Map only.

This map indicates waterfowl production capabilities for lands in the Bow Corridor and area. Relevant map sheets include 82/O (Calgary) and 82/J (Kananaskis Lakes) at 1:250,000 scale.

167. Canada Geological Survey. 1934. Canmore area, south portion, Alberta. Geological map.

168. Canada Geological Survey. 1934. Canmore area, north portion, Alberta. Geological map.

169. Canada Land Inventory. 1971. Soil capability for agriculture. Ottawa, ON: Department of Regional Economic Expansion. Map only.

This map indicates agriculture potential of lands in the Bow Corridor and area. Relevant map sheets include 82/0 (Calgary) and 82/J (Kananaskis Lakes) at 1:250,000 scale.

170. Canada Land Inventory. 1973. Land capability for wildlife-ungulates. Ottawa, ON: Environment Canada, Lands Directorate. Map only.

Land capabilities for ungulate production are delineated on this map at a 1:250,000 scale. Map sheets 82/0 (Calgary) and 82/J (Kananaskis) cover the lands of the Bow Corridor.

171. Canada Land Inventory. 1972. Land capability for recreation. Ottawa, ON: Department of the Environment. Map only.

Recreational potential is identified and delineated at a 1:250,000 scale for lands in the Bow Corridor and area. Relevant map sheets include 82/0 (Calgary) and 82/J (Kananaskis).

172. Canada Land Inventory. 1974. Land capability for forestry. Ottawa, ON: Environment Canada, Lands Directorate. Map only.

This map indicates forestry capabilities of each class of land delineated (1:250,000 scale). Map sheets 82/0 Calgary) and 82/J (Kananaskis Lake) cover the lands of Bow Corridor.

173. Canada Parks Service. 1992. The preservation of wildlife populations in the Bow Corridor, Alberta: A Banff National Park proposal to neighbouring municipalities. Internal report. Canadian Parks Service, Banff National Park, Banff, Alberta.

A preliminary report for internal circulation and use by adjacent municipalities for planning purposes. A GIS analysis of ecoregions in the Bow Valley and related wildlife.

174. Canadian Society of Environmental Biologists. 1983. Resource management in the Eastern Slopes. Symposium proceedings, Red Deer, Alberta, March 19, 1983. Alberta Chapter Canadian Society of Environmental Biologists, Edmonton, AB. 97 p.

These proceedings give an overview of resource use in the Eastern Slopes and identify conflicts associated with multiple resource use. Methods to minimize these conflicts are provided.

175. Canadian Facts. 1990. Survey of Calgary residents regarding potential interest in the Bow-Canmore area. Prepared for Alberta Tourism, Edmonton by the author, Vancouver. 27 p. Appendices.

Results of a survey of Calgary residents regarding their potential interest in the Bow Corridor area. This information to be used to assist in analysis of potential market demands for tourism products and to enable more effective planning.

176. Canadian Parks and Wilderness Society. 1991, July/August. The Bow Valley ecosystem. Special issue, news letter. Canadian Parks and Wilderness Society, Alberta Chapter, Edmonton, AB. 8 (1.1).

This issue gives a brief overview of concerns that the Canadian Parks and Wilderness Society has regarding development in the Bow Corridor.

177. Canadian Parks and Wilderness Society. 1991, Fall. Bow Valley mega project could drive out grizzly bears and wolverines. Borealis, 3 (1), 30-31.

This article outlines the concerns of the Canadian Parks and Wilderness Society regarding proposed developments for the Bow Corridor.

178. Canmore, Town of. 1990. Vision 2020/Goals for Canmore. Draft. Prepared for Canmore Town Council by the Town of Canmore, Alberta Municipal Affairs and The Vision 2020 Committee. 54 p.

This draft report contains a broad Vision statement for Canmore to the year 2020 and a proposed corporate plan outlining goals and policy. Currently this document is under review and is being revised in preparation for adoption as a statement of the Town's goals and policies.

179. Canmore, Town of. 1991. The Canmore housing market: A municipal strategy for the 1990's. Prepared by the Town Advisory Committee on Housing, Canmore, AB.

Report includes a summary of Canmore's demographics, economy, housing statistics and housing costs. Is based on information from hearings, specific research and survey results related to housing strategies.

180. Canmore Miner. 1975 - . Canmore Miner. Weekly serial. Canmore, AB.

181. Carr, H.D. 1968 Status of game in Region 2, Feb. 1968. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB. 6 p.

182. Carr, H.D. 1969. Status of game in Region II, May 1969. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division.

183. Carr, H.D. 1972. 1970 trophy sheep questionnaire. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division. 30 p.

184. Carr, Harold. 1985. Elk management plan for the Calgary area. Unpublished report. Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB.

This plan outlines the existing status of elk populations, habitat use and harvest characteristics with projections for potential elk numbers and hunter demands.

185. Carr, Harold D. 1989. Distribution, number, and mortality of grizzly bears in and around Kananaskis Country, Alberta. Wildlife Research Series Number 3. Publication No. T/195. Edmonton, AB: Alberta Forestry Lands and Wildlife, Fish and Wildlife Division. 31 p. Appendix.

This research report presents information pertaining to grizzly bear distribution, numbers and mortality in Kananaskis Country for the purpose of conservation and minimizing human-bear conflicts. Information from this study should also be applicable to understanding grizzly bear population dynamics in and around the Bow Corridor.

186. Carson McCulloch Associates Limited. 1984. Canmore Nordic Centre-Master Development Plan. Prepared for Alberta Olympic Secretariat. 288 p. Appendix.

The study area is located between Spray Lakes Road and Banff National Park, the north slopes of Mount Rundle and the Bow River floodplain. This report includes 41 pages of resource inventory that is based on existing information, field studies and interviews. Field studies determined the key species of wildlife to monitor.

187. Casa, L.; Smith, D. 1989. Vegetation mapping of the Bow Corridor. Studio Project. University of Calgary, Faculty of Environmental Design, Calgary, AB.

Delta Environmental Management Group Limited and Underwood McLellan & Associates Limited. 1991. A wildlife mitigation and monitoring program for the proposed Three Sisters Golf Course C Project: Addendum to the deficiency statement for the Three Sisters Site "C" EIA. Submitted to Alberta Environment, Environmental Assessment Division. Prepared for Three Sisters Golf Resorts Inc., Calgary, by the authors, Calgary, AB. 19 p. Maps.

188. CEP Consultants Limited & J.R. Century Petroleum Consultants Limited. 1985. Sour Gas Study of the Calgary Region. Prepared for Calgary Regional Planning Commission, Calgary, AB. 59 p. Appendices.

This report includes technical and policy information regarding the sour gas industry with in the Calgary Region and including the Canmore area. Sour gas inventories and developments are identified, regulations and policies are reviewed, potential development conflict zones are described and management options are discussed.

189. CEP Consultants Limited & J.R. Century. 1985. Energy Resources Study. Prepared for Calgary Regional Planning Commission, Calgary, AB. 65 p. Appendices.

This document contains an inventory of non-renewable resources including oil, gas, crude bitumen and coal and associated facilities within the Calgary Region and including the Canmore area. It also identifies non-renewable resource related policies and regulatory bodies, and land use planning concerns. Landuse management strategies and recommendations for areas having significant non-renewable resources is discussed.

190. Ceroici, W.J.; Prasad, B.S. 1977. Hydrogeology of the Canmore Corridor, Alberta. Unpublished report. Alberta Research Council.

191. Chao, D.; Hamilton, W.; Lutz, J.; Price M. 1992. GIS Pilot Study on mineral resources of the Bow Valley Corridor. Poster abstract. In Geological survey of Canada Mineral Colloquium, 22-24 January, 1992, Ottawa.

The Bow Valley was selected as a pilot area for developing Geoscience Information System (GSIS) methodologies for online and graphic display of mineral deposits data, using ArcInfo GIS software. This pilot effort has two principal products including a hard-copy mineral deposits map at 1:50,000 scale, presenting the deposits in combination with various layers of geologic and geographic information; and an online query/display package that displays the map on a screen with capabilities to (a) zoom in on an area, (b) retrieve and display all data related to any selected deposit, and (c) allow selection by various criteria (e.g. geological age, formation, township-range, etc).

192 Chen, Thierry; Lachapelle, Andre. 1987. Climate extremes of the Olympic Corridor. Edmonton, AB: Environment Canada, Western Region, Atmospheric Environment Service. Appendix.

193. Cheng, Jacqueline Ruth. 1978. Images of Banff and Canmore and the use of Banff National Park by motel visitors. PH.D. Dissertation, University of Calgary, Calgary, AB.

194. CHZM Hill Engineering Limited. 1990. Final Report Town of Canmore Highway 1A Drainage Study. Prepared for Alberta Transportation and Utilities. 44 p. Appendix.

Includes investigation of a number of alternative drainage systems, preparation of plans, and preparation of cost estimates for future upgrading of Highway 1A through Canmore.

195. Cicon Engineering. 1980. Rundle Estates, Appendices of Outline Plan for Stage One and Stage Two. Unpublished report. Prepared for Spray Lakes Holding Limited., Calgary, by the author, Calgary, AB. Appendices.

Appendices of The Outline Plan for Stage One and Stage Two of Rundle Estates. Includes certificates of title, soil analysis, timber cruise results, architectural renderings, estimates of projected traffic generation and methods for noise attenuation.

196. Cicon Engineering. 1980. Rundle Estates- Stage one outline plan, Canmore, Alberta. Unpublished report. Prepared for Spray Lakes Holdings Limited., Calgary, by author, Calgary, AB. 42 p. Maps.

An outline plan for Rundle Estates which reviews residential demands, existing community plans, bio-physical resources, development constraints, services infrastructure, community facilities and discusses proposed landuses, and utility and transportation services.

197. Clarkson, P.L.; Doesburg, W.F.G.; Glaholt, R.G.; Moore, D.H.; Patterson, J.C.M. 1982. Wildlife observation sites and facilities for Kananaskis Country. Prepared for Alberta Department of Energy and Natural Resources, Fish and Wildlife Division, by the University of Calgary, Faculty of Environmental Design,AB. 69 p. Appendices.

This report identifies suitable locations within Kananaskis Country, including the Bow Corridor, for low impact viewing of wildlife.

198. Cochrane, Paul; McLallum, David; Measure, Harry; Ollerenshaw, Rob. 1980. Canmore Benchlands Study. Unpublished report. Prepared for The Town of Canmore, Canmore, by The University of Calgary, Faculty of Environmental Design, Calgary, AB. 121 p.

This study provides information for assisting in evaluation of development proposals for the benchlands to the south and east of

Canmore. It includes an assessment of both biophysical and socio-economic characteristics and constraints, of the Canmore area, with an in depth examination of major concerns and formulation of development guidelines.

199. Collins, Ruth L. 1969. Big game inventory and habitat classification of mountain and foothill portions of the Sheep, Kananaskis and Bow River Drainages. Preliminary unpublished report. Alberta Department of Lands and Forests, Fish and Wildlife Division, Calgary, AB. 50 p. Appendices.

This document contains information on vegetation, wildlife habitat, and reported observations of ungulates and bears in the Kananaskis Country, including the Bow Corridor.

200. Committee on the Status of Endangered Wildlife in Canada (COSEWIC). 1991. A complete list of endangered species in Canada as determined by the author. (Annual publication.)

201. Cook, A.R. 1980. Calgary Regional Goat Survey, July 3-5, 1980. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB. 23 p. Appendices.

202. Cook, A.; Hall, Carr H.; Gunderson, G. 1971. Goat and sheep winter survey for 1971. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division. 7 p. Map.

203. Cook, A.; Hall, W.K. 1976. Bow Corridor ungulate survey, Jan. 7-9, 1976. Wildlife Inventory Job Completion Report XV. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division.

204. Cook, A.; Hall, W.K. 1976. Region 2 sheep survey, Jan 7-13, 1976. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division. 11 p.

205. Cook, A.; Hall, W.K. 1978. Aerial sheep survey of the Edson, Red Deer and Calgary regions using the revised winter range technique, May 1978. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division. 100 p.

206. Cooke, L.J.; Wilson, K.J. 1972. Kananaskis-Spray Drainage District, evaluation and planning alternatives, Phase I. Department of Municipal Affairs, Provincial Planning Branch. 34 p. Appendices.

This report describes the methodology involved in preparation of land use mapping for the Kananaskis-Spray Drainage District. Land use allocation is primarily restricted to renewable resources with other resource uses being considered secondarily.

207. Cornish, B.; Van Camp, J; McNicholl, M. 1980. The impacts of recreation on fish and wildlife with emphasis on Kananaskis Country. A literature review and partial bibliography. Planning Document No. 4. Alberta Energy and Natural Resources, Fish and Wildlife Division. 107 p. Appendices.

This document includes a discussion of known and suspected impacts of recreational activities and developments on fish and wildlife as it pertains to Kananaskis Country, including the Bow Corridor. Also discussed are potential mitigative measures.

208. Cote, Mark. 1984. Climate of Kananaskis. AB: Environment Canada, Atmospheric Environment Service. 119 pp. Appendices.

209. Cottonwood Consultants Limited. 1990. Bow/Canmore Corridor, Environmental Issues Analysis. Prepared for Alberta Tourism, Edmonton, AB., by the author, Calgary, AB.

Environmental and cultural resource concerns and issues related to tourism development in the Bow Corridor are defined and ranked as to importance. General mitigative measures for reducing potential impacts are suggested. Includes a brief overview of proposed tourism developments current to late April 1990.

210. Crockford, Michael Bertram Bray. 1956. The Canmore Basin. Guidebook, 6th Annual Field Conference, August 1956. Alberta Society of Petroleum Geologists. pp. 92-99.

211. Daffern, Gillean. 1985. Kananaskis Country trail guide. Second Edition. Calgary, AB: Rocky Mountain Books. 358 p. Index and maps.

A popular account of formal and informal hiking trails in the Bow Corridor is provided in this guide. Natural history and historical points of interest are also included.

212. Damas and Smith, A division of DSL Consultants Limited. (1983). Wildlife mortality in transportation corridors, in Canada's National Parks, Impact and mitigation. Volume 2. Prepared for Parks Canada by the author, Ottawa, ON. Various paging. Appendices.

This is an appendix volume of a highway wildlife mortality study conducted for Canada's National Parks. It includes a relatively detailed account of roadway and traffic characteristics and wildlife mortality. Emphasis is on elk, deer, bighorn sheep, moose, bear and coyote mortality. Recommendations for minimizing and monitoring highway related wildlife mortalities is included. While the study area did not include the Bow Corridor, the information presented will be useful for the Corridor.

213. Danielson, Barbara J. 1981. Availability and utilization of browse in Kananaskis Country. A preliminary survey report. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB. 72 p.

214. Davie, J.W.; Wisely, A.N. 1987. Mount Allen and Wind Ridge Bighorn sheep habitat enhancement. Project Completion Report. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB. 11 p.

215. Davies, Mervyn, J.E. 1991. Environmental Impact Assessment Report, Three Sisters Reports, An Air Quality Technical Report 9.6. An assessment for the Canmore/Bow Valley Corridor. Unpublished report. Prepared for Underwood McLellan & Associates and Three Sisters Golf Resorts Inc. by Concord Environmental Corporation., Calgary, AB. Various paging.

Technical document concerning potential impacts on air quality in the Bow Corridor as a result of development of the Three Sisters Resorts. Includes an overview of current air quality and emission source conditions, with an analysis of and modelling to project post development emissions. Potential mitigative measures are provided.

216. de Keijzer, Steven. 1981. Improvement District No. 8 Recreation Master Plan, 1981. Calgary Regional Planning Commission, Calgary, AB.

A planning document pertaining to recreational and cultural services requirements of Improvement District No. 8. Includes an overview of existing facilities, services, demographics and policy. Planning alternatives and recommendations are reviewed.

217. DeLCan, De Leuw Cather, Canada Limited. 1981. Rundle Heights, Canmore, Alberta - Tentative plan of subdivision. Prepared for Alberta Housing Corporation, Edmonton by the author, Calgary, AB. Various paging. Appendices.

Supporting document of the Rundle Heights Tentative Plan which includes planning status, summary of biophysical and cultural resources, review of existing services/facilities and analysis of constraints to development, and details of the proposed development.

218. DeLCan, De Leuw, Cather Canada Limited. 1982. Outline-Concept Plan, North-East Benchlands Area 4 Canmore, Alberta. Unpublished report. Prepared for Alberta Housing Corporation, Edmonton, AB, by the author, Calgary, AB. Unpaginated. Maps.

A concept plan for north-east Canmore and adjacent lands. Gives an overview of the site's physical characteristics and forest cover. Included is a feasibility analysis of various development proposals, the concept plan and a detailed development outline plan.

219. DeLCan, De Leuw Cather, Canada Limited. 1982. The Town of Canmore, Alberta, N.E. Benchlands storm water management study, 1982. Prepared for Alberta Housing Corporation, Edmonton by the author, Calgary, AB. 27 p.

A report summarizing the existing drainage situation, analysis of potential storm water run off volumes, proposed drainage management systems, cost estimates and related recommendations.

220. DeLCan, De Leuw Cather, Western Limited. 1982. NorthEast Benchlands Area 2, Canmore, Alberta. Tentative plan of subdivision. Prepared for Alberta Housing Corporation, Calgary by the author, Calgary, AB. Unpaginated. Appendices and maps.

This tentative plan includes discussion on the design concept proposed land uses and development service requirements.

221. Delta Environmental Management Group Limited. 1990. An Evaluation of Vegetation and Wildlife Resources and Potential Impacts for the Kananaskis Guest Ranch Development Proposal. Unpublished report. Prepared for the Kananaskis Guest Ranch by the authors, Calgary, AB. 15 p. Appendix.

An overview of vegetation and wildlife resources together with a discussion of potential impacts related to the proposed golf course and related support facilities.

222. Dielman, P. 1980. Summary of bighorn sheep observations of Wind Ridge and Pigeon Mtn. from 1971-1980. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division. 12 p.

223. Dillingham Corporation. 1973. Mining and land resources in the Canmore Corridor, A brief to the Environment Conservation Authority Hearings. Prepared by the author, Canmore, AB. Unpaginated.

A history and current account (to approximately 1977) of coal mining activity at Canmore, including impacts on the economics and biophysical resources of the area. The possibilities of property development for residential and recreational purposes are reviewed.

224. Downing, D.; Hay, W. K.; Karpuk, E; Bradshaw, D. 1989. Biophysical inventory of the proposed Yamnuska Natural Area. Unpublished report. Alberta Forestry, Lands and Wildlife Resource Information Branch, Edmonton, AB. 102 p.

225. Duke, Michael John Maclachlan. 1986. Geochemistry of the Exshaw shale of Alberta (microform): an application of neutron activation analysis and related techniques. Master's thesis, University of Alberta, 1983, Edmonton, AB. Ottawa, ON: National Library of Canada. 3 microfiches.

226. EBA Engineering Consultants Limited, 1976. Ground water Evaluation, Canada Cement Lafarge Limited Supply Well. February, 1976.

227. EBA Engineering Consultants Limited. 1982. Geotechnical evaluation of mining subsidence, Rundleview Estates - Phase I. Unpublished report. Prepared for Patrician Land Corporation Limited., Calgary by the author, Calgary, AB. 39 p. Appendices.

Discusses the history, extent and methods of coal workings, existing subsidence features and mechanisms of subsidence. Identifies potential hazards, presenting a mining subsidence risks zonation plan and gives recommendations for development alternatives and remedial measures.

228. EBA Engineering Consultants Limited. 1982. Preliminary study of mining subsidence risks. Rundleview Heights Development. Prepared for Alberta Housing Corporation, Edmonton by the author, Calgary, AB. 15 p. Appendices and maps.

The history, extent and methods of coal mining under Rundleview Heights Development are identified and potential hazards to developments are reported on. Site risk zonation is presented with accompanying cost implications for safe site development.

229. EBA Engineering Consultants Limited. 1982. Geotechnical evaluation of mining subsidence, Rundleview Estates-Phase I, Supplementary Investigation. Unpublished report. Prepared for Patrician Land Corporation Limited. by the author, Calgary, AB. 7 p. Appendices.

This report presents the findings of supplementary geotechnical investigations of the potential mine subsidence risks under Rundleview Estates.

230. Economics Research Associates. 1979. Market support and facilities for The Evan Thomas development area 1979. Prepared for the Government of Alberta. 39 p.

Results of a marketing study of the Evan Thomas area including the Bow Corridor are presented. Recreational user patterns and demand is analyzed to determine projected demands and facility requirements for the area.

231. Edwards, W.A.D. 1979. Sand and Gravel Deposits in the Canmore Corridor, Area, Alberta. Report 79-2. Calgary, AB: Alberta Research Council, Earth Sciences. 30 p.

Delineation and mapping of sand and gravel deposits at a 1:50,000 scale. Information is based on mapping by a number of geologists beginning in 1965. The report is supplemented by field surveys and sampling in 1976 and 1977.

232. Edwards, W.A.D. 1982. Evaluation of Granular Deposits in the Canmore Corridor Terraces. Prepared for Alberta Energy and Natural Resources by the Alberta Research Council, Edmonton, AB.

233. Edwards, W. A. Dixon. 1991. Geology and industrial minerals of the Bow Valley, Banff-Canmore area, Alberta. The 27th forum on the geology of industrial minerals. Field trip 1A; Banff, Alberta, May 9, 1991. Alberta Geological Survey and Alberta Research Council. 47 p.

This photo enhanced guide is intended as a self guided tour of the geology, minerals industry and scenery/history of the Bow River Valley.

234. Edwards, W.A.D.; Hudson, R.B. 1983. Setting the Scene for Aggregate Resource Management in Alberta. In Proceedings of the 19th Forum on the Geology of Industrial Mineral, Toronto, May 24-27, 1983. Ontario Geological Survey Miscellaneous Paper, 114, 136-143.

235. Elmer W. Brooker & Associates Limited. (n.d.) Geotechnical evaluation, Exshaw Housing Subdivision; Report 1. Unpublished report. Prepared for Alberta Housing Corporation. 3 p. Appendices.

Technical report on hydrological and geotechnical evaluations of a proposed housing subdivision at Exshaw, Alberta.

236. Energy Resources Conservation Board, 1974. Review of the Alberta coal industry, 1973. Calgary, AB: Energy Resources Conservation Board. Various paging.

This document focuses mainly on the status of the coal industry. It discusses the existing and projected impacts of that industry on the economy of the province. Specific reference to Canmore and area is included.

237. Energy Resources Conservation Board. 1975. Comments on certain recommendations of the Environment Conservation Authority relating to the future development of coal and natural gas resources of the Eastern Slopes. Calgary, AB: Energy Resources Conservation Board. 14 p. Appendix.

This document contains recommendations for coal resource development with specific mention of mining in the Canmore area.

238. Engineering Canada Associates Limited. 1981. North-East Benchlands, Canmore, Alberta. Tentative plan of subdivision. Unpublished report. Prepared for Alberta Housing Corporation, Edmonton, by the author, Calgary, Ab. 12 p. Appendices and map.

Contains general information regarding the North-East Benchlands subdivision and a response to concerns generated by the previously released Outline Plan.

239. Engineering Canada Associates Limited. 1982. Sewage treatment investigations of the Former Canmore Mines Property. Unpublished report. Engineering Canada Associates. 52 p.

This report presents an analysis of sewage treatment needs and alternatives for the Former Canmore Mines Property and surrounding region of I.D. No. 8.

240. Environment Conservation Authority. 1973. Land use and resource development in the Eastern Slopes. Proceedings of the Public Hearings, June-July 1973, Part III A, Calgary, AB. by the authors, Edmonton, AB. 315 p.

These proceedings contain background information presented by concerned citizen groups, corporations,and other interest groups regarding land use and resource development in the Eastern Slopes. A number of papers relate directly to the Bow-Bow Corridor.

241. Environment Conservation Authority. 1973. Land use and resource development in the Eastern Slopes. Proceedings of the Public Hearings, June-July 1973, Part III B, Calgary AB. Edmonton, AB: Author. pp. 316-474.

These proceedings contain background information presented by concerned citizen groups, corporations, and other interest groups regarding land use and resource development in the Eastern Slopes. A number of papers relate directly to the Bow Corridor.

242. Environment Conservation Authority. 1973. Land use and resource development in the Eastern Slopes. Proceedings of the Public Hearing, June-July 1973, Part IV, Canmore. Edmonton, AB: Author.

These proceedings contain background information presented by concerned citizen groups, corporations, and other interest groups

regarding land use and resource development in the Eastern Slopes. A number of papers relate directly to the Bow Corridor.

243. Environment Conservation Authority. 1973. Land use and resource development in the Eastern Slopes. Information Bulletin No. 12. Edmonton, AB: Author. 29 p. Appendices.

This discussion paper provides background information for the Eastern Slopes public hearings. It reviews current land uses with associated demands and conflicts. It offers general recommendations for proper land use planning.

244. Environment Conservation Authority. 1973. Commercial proposals for tourism and recreation to be presented at the public hearings on land use and resource development in the Eastern Slopes. Information Bulletin No. 4. Edmonton, AB: Author. 24 p.

In this document the major development proposals (1973) for the Eastern Slopes are presented as background information for the Eastern Slopes public hearings.

245. Environment Conservation Authority. 1973. Land use and resource development in the Eastern Slopes. Interim Report No. 1. Interim report and recommendations on commercial tourist development proposals presented at the public hearings on land use and resource development in the Eastern Slopes. Edmonton, AB: Author. 111 p.

In this interim summary report specific Eastern Slopes land development proposals are presented along with discussions and the Environment Conservation Authority recommendations.

246. Environment Conservation Authority. 1973. Current status report on Alberta's Eastern Slopes. Information Bulletin No. 2. Edmonton, AB: Author. 33 p.

Provided in this background report as part of the public hearings is a brief overview of the bio-physical resources and existing resource uses of the Eastern Slopes.

247. Environment Conservation Authority. 1973. Land use and resource development in the Eastern Slopes. Proceedings of the Public Hearings into commercial recreational and tourist development proposals, June-July, 1973, Part XI. Edmonton, AB: Author, pp. 216-1074.

Included in these proceedings are submissions by various development companies and groups for proposed developments within the Bow Corridor.

248. Environment Conservation Authority. 1974. Land use and resource development in the Eastern Slopes. Interim Report No. 3, Bow River Basin. Edmonton, AB: Author. 69 p.

In this interim report an overview of the biophysical resources of the Eastern Slopes is included along with administration, land use analysis, and review of public input.

249. Environment Conservation Authority. 1974. Land use and resource development in the Eastern Slopes. Report and recommendations. Edmonton, AB: Author. 175 p. Appendices.

This document is the final report and recommendations resulting from public hearings on land use issues in the Eastern Slopes. An overview on resources of the Eastern Slopes, and the public hearing process is included. Emphasis is placed on land use recommendations. Specific and general reference is made to the Bow Corridor.

250. Environment Conservation Authority. 1976. Review of coal exploration policies and programs in the Eastern Slopes of Alberta. Reports and recommendations. Edmonton, AB: Alberta Environment Conservation Authority. 93 p. Appendices.

While not specific to the Bow Corridor this report is relevant to the study area due to it's coal based history.

251. Environment Council of Alberta. 1979. Proceedings of the public hearing on the environmental effects of forestry operations in Alberta, March 6. Volume 10, Canmore, Alberta. Edmonton, AB: Author. 177 p.

This document includes a presentation by The Upper Bow Valley Fish and Game Association on environmental concerns, identified by that group, for natural resources in Bow Corridor.

252. Environmental Management Associates Limited. 1990. Rare plant survey of proposed Four Seasons Resort area. Unpublished report. Prepared for N. Trouth P. Engineering. 31 p. Appendix.

Field survey and inventory of vegetation to determine extent and species of rare plants.

253. Environmental Management Associates Limited. 1991. Banff Loop Natural Gas Transmission Pipeline Development and Reclamation Plan III (Morley to Seebe). Unpublished report. Prepared for Canadian Western Natural Gas Company Limited, Calgary, AB. 136 p. Appendix.

Development reclamation planning for a proposed pipeline corridor. The field work and inventories focused on vegetation, soils and terrain. The fisheries portion of the work was at a location along the Lower Kananaskis River. The appendix includes a separate detailed soil survey report.

254. Environmental Sciences Centre (Kananaskis). 1974. The mountain environment and urban society. Kananaskis Pilot Study. Unpublished report. Prepared for The University of Calgary Committee for Man and the Biosphere by The Environment Sciences Centre (Kananaskis), University of Calgary. 341 p. Appendices.

This document provides an inventory of biophysical, cultural and human activity in the Kananaskis area and identifies human impacts on the resources of the area. Special emphasis is placed on urban societies' influence on the mountain environment. While the study area is located outside of the Bow Corridor the similarity in land types and human use patterns make it a relevant document.

255. EPEC Consulting Western Limited. 1982. Report on the proposed connector roadway from the downtown business centre to the Canmore Bypass (S.R. 742). Prepared for The Town of Canmore by the author, Calgary, AB. 32 p. Appendices included.

A technical document of proposed intersection plans with preliminary cost analysis.

256. Esterley, S.R.; et al. 1990. NWRI Contribution No. 90-45. The Estimation of water quality changes between locations within a river system. Prepared for the National Water Research Institute. 44 p.

The problem of estimating differences in water quality between sampling locations using data from a water quality sampling network is addressed. The case study involving a Bow River head water location would be of interest to anyone designing and assessing water quality sampling systems.

257. Fedirchuk McCullough & Associates Limited. 1990. Three Sisters Resort Project: Historical Resources Overview. Unpublished report. Prepared for Underwood McLellan & Associates, Calgary, AB.

258. Fedirchuk McCullough & Associates Limited. 1990. Kananaskis Ranch Golf Course and Family Destination Historical Resources Impact Assessment, ASA Permit 90-105. Unpublished report. Prepared for Lombard North Group (1980) Limited, Calgary, AB by the authors, Calgary, AB. 61 p. Appendix.

Regional perspective as well as site specific field study of the property.

259. Fedirchuk McCullough and Associates Limited & Great Plains Research Consultants. 1991. Historical resources impact assessment Three Sisters Golf Resorts Inc. Phase I - Golf Course C. ASA Permit 90-65. Unpublished report. Prepared for UMA Engineering Limited, Calgary, AB by the authors, Calgary, AB.

260. Fedkenheuer, A.W.; Knapik, L.J.; Walker, D.G. 1987. Minesoil and landscape reclamation of the coal mines in Alberta's mountains and foothills. Report No. RRTAC 87-2. Prepared for The Land Conservation and Reclamation Council and The Coal Association of Canada by Pedscan Land Evaluation Limited.

State-of-the-art reclamation techniques and needs for research are discussed. Study area included the Canmore area.

261. Felip, Carlos R.; Sanderson, Michael D.; Welsh, M. Martha. 1980. Canmore, Alberta: A case study of planning for a small town. Pages 213-256. In Search of Place-Planning for Small Communities. Proceedings of the 1980 CIP/ICU National Conference, Kitchener ON, June 22nd- 26th, 1980. 382 p.

This paper presents an overview of the landuse planning process and programme conducted in the Town of Canmore between 1975 - 1980. Also includes an assessment of the effectiveness of the planning programme at meeting a complex array of conflicting demands and pressure for urban growth, recreation, tourism development, and preservation of the natural environment.

262. Ferguson, Heather J.; Van Egmond, Timothy D.; Green, Jeffrey E. 1991. Vegetation communities within the Three Sisters Project Area, and the adjacent south Canmore Corridor, Alberta. Draft Report. In Environmental Impact Assessment Report, Three Sisters Resorts, Vegetation and Wildlife, technical Report 9.3-4. 24 p. Maps.

Predominant vegetation associations are identified, mapped at a 1:20,000 scale using air photo interpretation and the areal extent of the cover types determined within a Geographical Information System. The potential occurrence of rare and endangered plants is investigated and discussed.

263. Fleming, Sanford. 1880. Report and documents in reference to the Canadian Pacific Railway. Prepared for Sir Charles Tupper, Minister of Railways and Canals. Ottawa, ON: Maclean, Roger and Company. 373 p. Index and maps.

Included are descriptions of the land on both sides of the Bow River, near the mountains and at its mouth. Mention is made of the people who lived there, foods that they grew, wildlife, vegetation, streams, surface waters, and the terrain including rocks and minerals.

264. Flygare, Halle. 1979. Ungulate Mortality and Mitigated Measures, Trans Canada Highway, Banff National Park. Parks Canada, Banff National Park, Banff, AB. 167 p.

265. Fox, J.C. 1981. Industrial Minerals Tour of the Canmore Corridor, Alberta. CIM 83rd Annual General Meeting, Calgary, AB.

266. Fox, Frederick Glenn. 1954. Exshaw Formation. Alberta Society of Petroleum Geologists News Bulletin. 2(7), 6.

267. Fraser, Paul; Pall, Orval. 1982. Wildlife mortality on roads in Kananaskis Country, Alberta. A progress report. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB. 32 p. Appendices.

Results and discussion of a wildlife mortality monitoring program initiated in 1981 is presented in this report. Incidence of road kills for all wildlife by road stretch and time of year is included. The study area encompassed highways in the Bow Corridor.

268. Frogatt, K.; Hall, W.K. 1976. Region II mountain moose (drainages) survey. Wildlife Inventory Job Competition Report XVII. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division. 9 p.

269. Gardner, James S. 1981. Natural hazards in a mountain environment: The Bow Valley region, Alberta. Unpublished report. University of Calgary, Kananaskis Centre for Environmental Research. 41 p.

A description of natural hazards, landuse impacts, future implications of development and planning approaches, for the Corridor.

270. GCG Engineering Partnership. 1981. Town of Canmore traffic study. Prepared for The Town of Canmore by the author, Edmonton, AB. 54 p.

This study evaluated existing traffic problems and roadway standards, and reviewed the downtown traffic plan. A future transportation systems analysis and recommended roadway network is included.

271. Gleddie, J. 1960. Geology of the Bow Valley Calgary-Banff. 1960 Exploration Conference, Banff School of Fine Arts, September 19, 20, 21. Imperial Oil Limited - Western Division, Calgary, Alberta. 40 p.

An illustrated guide on the geology of the Bow River Valley from Calgary to Banff including details of stratigraphy and structure.

272. Glick, I. N.; Glick, Millie. 1981. Boom towns. A quest for well-being. Prepared for The Canadian Mental Health Association, Alberta Division by Co-West Associates, Edmonton, AB. 94 p.

This report gives an overview of community dynamics as affected by rapid development, identifying psychological and sociological

repercussions. While directed at general boom town problems in Alberta there is specific reference and relevance to The Town of Canmore.

273. Golding, D. L. 1979. Calculated snowpack evaporation during chinooks along the Eastern Slopes of the Rocky Mountains in Alberta. Journal of Applied Meteorology, 17(11), 1647-1651.

Potential evaporation from snow packs, during chinooks, above and below tree line along the Eastern Slopes is investigated.

274. Goudge, M.F. 1945. Limestones of Canada,Part 5, Western Canada. Canada Mines Branch Report 811 (pages 106-110). 233 p. (Cited in Holter 1976.)

This report contains a description of limestone resources occurring in the Exshaw area.

275. Green, Hubert U. 1951. The wolves of Banff National Park. Unpublished report. Department of Resources and Development, National Parks Branch, Canada.

This report provides historical information on wolf occurence and distribution in the area of Banff National Park. Emphasis is on wolf ecology, mortality and movement patterns as determined through research and observation. The study area encompassed the Lower Bow Valley and Spray Valley, 1944-1950.

276. Greenlee, G.M. 1974. Soil survey of Bow Valley Provincial Park and adjacent Kananaskis area and interpretation for Recreational use. Report M-74-2. Prepared for Alberta Provincial Parks, by the Alberta Institute of Pedology. 76 p. Appendix.

Detailed soil survey and mapping on aerial photo mosaics as a basis for recommended land uses. Findings and techniques have planning applications in other locations.

277. Gryba, Eugene, M. (n.d.) Historical resources impact assessment of the Canmore North West Mounted Police Barracks. Canmore Centennial Museum, Canmore, AB.

278. H.G. Stephenson (Mining Consultants) Limited. 1976. Canmore Creek No. 3 Strip Mine at Georgetown, near Canmore, Alberta. Unpublished report. Prepared for The Alberta Department of the Environment, Edmonton by the author, Canmore, Alberta. 7 p.

A brief reclamation plan outlining component operations, equipment needs, costing and sharing of responsibilities for reclamation of a strip mine near Canmore. Possible preservation and enhancement of an existing lake at the site is discussed.

279. H.G. Stephenson (Mining Consultants) Limited. 1976. A report on reclamation of the Walker Strip Mine at Georgetown, near Canmore, Alberta. Unpublished report. Prepared for The Alberta Department of the Environment, Edmonton by the author, Canmore, Alberta. 7 p.

A brief reclamation plan outlining component operations, equipment needs, costing and proposed sharing of responsibilities for reclamation of a strip mine near Canmore. Creation of a small lake at the site is suggested.

280. Haley-Charles Consulting. 1984. Final Report: Historical resources impact assessment Area 4, North-east Benchlands, Canmore, Alberta ASA Permit 84-92. Unpublished report. Prepared for DeLCan, De Leuw Cather, Canada Limited by the authors, Calgary, AB.

281. Hall, W.; Cook, A. 1974 Documentation of the 1973 non-trophy sheep season. Wildlife Inventory, Job completion Report #2. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division. 12 p.

282. Hall, W.k.; Cook, A. 1975.Documentation of the 1974 non-trophy sheep season. Special Report, Job Completion Report XXVII. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division. 30 p.

283. Hall B.; Froggart, K.; Cook, A. 1975. Calgary region sheep survey. Wildlife Inventory Job Completion Report XXVIII. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division. 7 p.

284. Hamilton, H.R. 1982. Bow River water quality, 1970-1980. Draft. Unpublished report. Pollution Control Division, Alberta Environment, Calgary, AB. 56 p.

A review of the 1970-1980 Bow River water quality data base including sites situated in the Bow Corridor. Discussion includes chemical and bacterial, characteristics and trends, and effluent quality and point source river loading.

285. Hammer, David; Herrero, Stephen (Eds.). 1982. Ecological studies of the grizzly bear in Banff National Park. Unpublished draft, University of Calgary, Calgary, AB. 292 p. Appendices.

This detailed report provides information on grizzly bear ecology and vegetation in the Rocky Mountain front ranges and more specifically the Cascade and Panther valleys of Banff National Park.

286. Hardy Associates (1978) Limited. 1983. Feasibility Study, Dust Control Lac Des Arcs. Preliminary Report. Prepared for Improvement District No. 8, Alberta Municipal Affairs by the authors, Calgary, AB. 15 p. Appendices.

In this document recommendations are provided as to means of reducing wind erosion and subsequent dust control problems associated with the exposure of sandy shoreline soils of Lac Des Arcs.

287. Harrison, G.; Hooper, R.; Jacobson, P. 1982. Trans Canada Highway ungulate population statistics, Banff National Park (east gate to Sunshine turn-off). Parks Canada, Western Region, Calgary, AB.

288. Harrison, G.; Hooper, R.; Jacobson, P. 1980. T.C.H. Wildlife Mitigation Measures. Banff National Park (east gate to Sunshine turn-off). Parks Canada, Western Region, Calgary, AB. 153 p.

289. Helfrich, H. 1980. Physical, chemical and biological features of the Bow River. A Literature Review. Alberta Energy and Natural Resources, Fish and Wildlife Division. 28 p.

This report was compiled to summarize the existing data on the Bow River and its fisheries resource. A total of 46 reports are listed in the reference section.

290. Henderson, L.; Forman, R. 1982. Recreational impacts on wildlife in Kananaskis Country, Alberta. Unpublished report. Fish and Wildlife Division, Alberta Energy and Natural Resources, Calgary, AB. 103 p. Appendices.

The impacts of recreational landuse and facility developments within Kananaskis Country, including the Bow Corridor, is analyzed and discussed in this report. All wildlife groups including invertebrates, amphibians, reptiles, birds and mammals were included in this analysis.

291. Hills, Brian. 1987. An evaluation of the fish population of Gap Lake, July 1986. Unpublished report. Alberta Forestry, Lands and Wildlife, Fish and Wildlife Division, Calgary, AB.

Gill netting was employed to determine fish population structure and size for Gap Lake. Recommendation for management and future studies are included.

292. Holland, W.D.; Coen, G.M. (Eds.). 1983. Ecological (biophysical) land classification of Banff and Jasper National Parks. Volume I, Summary. Publication No. M-83. Edmonton, AB: Alberta Institute of Pedology. 193 p.

This volume summarizes characteristics of the land forms, soils, vegetation and wildlife resources found in Banff and Jasper National Parks. Management considerations and interpretive guidelines are presented for resource managers. As with accompanying volumes the information referring to the lower Bow Valley will also generally apply to lands within the Corridor.

293. Holland, W.D.; Coen, G.M. (Eds.). 1982. Ecological (biophysical) land classification of Banff and Jasper National Parks. Volume II, Soil and vegetation resources. Publication No. SS-82-44. Edmonton, AB: Alberta Institute of Pedology. 540 p.

A detailed account of the land forms, soils and vegetation of Banff and Jasper Parks is included in this volume. It also contains a description of the climate, physiography, topography, geology and geomorphology. An ecological classification system is presented based on an integration of the landforms, soils and vegetation types.

294. Holmes, John D.R. 1978. The Canmore Corridor: The historical geography of the Pass Site 1880 to the Present. Master's thesis submitted to the University of Calgary, Calgary, AB. 123 p.

A description of the changing causes and effects influencing development within the Corridor are explored over a 100 year period. Includes a profile residents' attitudes to increased tourism activity in the area.

295. Holroyd, G.L.; Van Tighen, K.J. 1983. Ecological (biophysical) land classification of Banff and Jasper National Parks. Volume III, Part A and B, The Wildlife inventory. Prepared for Parks Canada. Edmonton, AB: Canadian Wildlife Service. 691 p.

Distribution, population characteristics, and species associations for herptiles, birds, and mammals are evaluated and discussed from an ecological land type perspective. Information contained related to the lower Bow Valley will generally be applicable to understanding relationships within the Bow Corridor.

296. Holter, M.E. 1976. Exshaw Area. In Limestone resources of Alberta. Economic Geology Report 4 (Pages 16-20, 41-51). 91 p. Edmonton, AB: Alberta Research Council.

A review of Alberta's economically important limestone resources including geology of the area and chemical analysis.

297. Holter, M.E. 1976. Limestone Resources of Alberta. Mont., Bur. Mines Geol., Special Publication. No. 74. MBGSA. pp. 37-50.

298. Hoodoos Highlander, The. 1976 - . The Hoodoos highlander. Weekly serial. Canmore, AB. ISSN 1229-768X.

299. Hornbeck, Gary E.; Balagus, Peter; Green, Jeffrey E. 1991. Aerial surveys of ungulates on and adjacent to the Three Sister Resorts' project area, Canmore, Alberta. Draft. Prepared for Three Sisters Resort Inc. by The Delta Environmental Management Group Limited, Calgary, AB. 15 p.

300. Hornbeck, G.E.; Balagus, P.; Green, J.E. 1991. Track count surveys in the Three Sisters Resorts project area near Canmore, Alberta. Draft. Prepared for Three Sisters Resorts Inc. by The Delta Environmental Management Group Limited, Calgary, AB. 27 p.

301. Hornbeck, G. E.; Balagus, P.; Green, J. E. 1991. Browse and pellet group surveys in Wind Valley near Canmore, Alberta. Prepared for Three Sisters Golf Resorts Inc., Calgary, by The Delta Environmental Management Group Limited, Calgary, AB. 36 p.

302. Huggard, David John. 1991. Prey selectivity of wolves in Banff National Park. Master's thesis paper. The University of British Columbia, Vancouver, B.C. 119 p.

In this study, behavioural and environmental components of wolf predation were assessed and related to wolf-large ungulate system dynamics in Banff National Park.

303. Hughes, J.D. 1975. Correlation and Cyclicity Analysis of the Jurassic-cretaceous Kootenay Formation near Canmore, Alberta. Master's Thesis, University of Alberta, AB. Unpaginated.

304. Hughes, Gary W. 1983. Grotto Mountain Pond, Project Completion Report. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB. 3 p. Appendices.

This report summarizes construction and costs associated with a fisheries project at Grotto Mountain Pond in the Bow Corridor.

305. Hunter, Ian G.; Bloy, Graeme Richard; Legget, Sidney R. 1985. Depositional environments of the Upper Devonian Cairn-Southesk formations, White Man Gap area, Canmore, Alberta. Canadian Society of Petroleum Geologists. 4 p.

306. Hydrogeological Consultant Limited. 1981. Many Springs, 1981 ground water evaluation program. Unpublished report. Prepared for Alberta Fish and Wildlife by the authors. 63 p. Appendices.

This study investigated the spatial extent of the Many Springs Aquifer in the Exshaw - Seebe area and determined the level of water quality/quantity. This work was carried out in conjunction with the Monenco Consultants Limited's test drilling program for the same area.

307. Hydrogeological Consultants Limited. 1980. Town of Canmore, 1979/80 ground water program. Unpublished report.

308. IBI Group. 1992. Bow Corridor employee housing study. Final Report (February 1992). Prepared for Alberta Municipal Affairs and Alberta Tourism by the authors, Calgary, AB. 101 p. Appendices.

This study evaluated mechanisms for providing housing to employees in the tourism industry and other sectors of the economy active in the Bow Corridor. Included in this report are to be recommendations which can be implemented by the relevant Municipal Councils, developers and industries required to provide housing. It includes extensive legislative research into local as well as outside jurisdictions. Approaches to staff housing used in other tourism based communities in North America were studied. A data bank of relevant up to date literature was used as a starting point.

309. Inland Waters Directorate. 1969. Bacteriological and nutrient study of major surface waters in Banff National Park. Technical Report WQB-79-5. Inland Waters Directorate, Ottawa, ON. 60 p. Appendix.

This study investigated the effects of human activities on waters upstream of the Corridor.

310. Inntrec Group Limited. 1981. Analysis of the development potential of the former Canmore Mines Property near Banff, Alberta. Unpublished report. Prepared for Patrician Land Corporation Limited., Calgary by the author, Calgary, AB. 79 p.

This document gives an overview of market trends, biophysical and cultural resources and identifies developable lands. It includes servicing requirements, development approach and alternatives for the former Canmore Mines Property.

311. Inntrec Group Limited. 1982. Area structure Plan for ECHO. Submitted to Improvement District No. 8 by Patrician Land Corporation Limited., Calgary, AB. Prepared by the author, Calgary, AB. 56 p.

An Area Structure Plan for lands south of the Trans-Canada Highway and east of Canmore. Includes a development concept, proposed land uses and phasing, and proposed servicing infrastructure.

312. Intera Environmental Consultants Limited. 1982. Wildlife utilization of the former Canmore Mines Property, with emphasis on ungulates. A preliminary report. Prepared for Inntrec Group Limited. by the authors, Calgary, AB. 46 p.

This document presents preliminary results of a one year study including a literature review, and aerial and field surveys of ungulate use of the former Canmore Mines Property. Critical habitats and development impacts are identified and mitigative recommendations are provided. A review various hunting management options is included.

313. Irwin, Donald. 1975. Banff visitor activities and regional growth. A planning study. (Source and city unknown.) 153 p.

Visitor activity patterns and projected facility demands were examined for Banff National Park with an analysis of the Bow Corridor's suitability for accommodating visitor facilities. An analysis of growth potential in the Bow Corridor was based on a review of government policy, present land uses, proposed developments, existing infrastructure and development potential.

314. J.M. Calder. 1982. Final Report: Historical resources impact assessment "Project 75" Canmore, Alberta. Prepared for Patrician Land Corporation Limited, Calgary, AB., by Lifeways of Canada Limited, Calgary, AB.

315. J.R. Salt and Associates. 1990. Report on a wapiti/ungulate survey, Wind Valley/Canmore Flats region. Unpublished report for Sweetgrass Consultants, Calgary, AB. (Cited in Sweetgrass Consultants Limited, 1991.)

316. Jalkotzy, M. 1990. Draft Management Plan for cougar in Alberta. Unpublished report. Prepared for Alberta Forestry, Lands and Wildlife, Fish and Wildlife Division, Edmonton.

317. Jalkotzy, M.; Pall, Orval; Carr, Harold D. 1985. A summary of the 1984 summer ungulate surveys of the Mount Allan Area. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB.

318. Janz, B.; Storr, D. 1977. The climate of the contiguous mountain parks: Banff, Jasper, Yoho and Kootenay. Project Report No. 30. Prepared for Parks Canada Department of Indian and Northern Affairs. Edmonton, AB: Department of the Environment, Canada, Atmospheric Environment Service. 325 p.

319. Jaques, Dennis R. 1976. Winter alpine-subalpine wildlife habitat in the southern Rocky Mountain in Alberta. Environmental Sciences centre (Kananaskis), The University of Calgary, Calgary, AB. 103 p. Appendices.

In this study alpine-subalpine plant associations and snow free habitat were identified and delineated by employing air photo interpretation and field sampling. Elk and bighorn habitat was inventoried, mapped, and carrying capacities were analyzed. The study area encompassed Pigeon Mountain and other areas of the Bow Corridor south of Canmore.

320. Jamieson, Walter. 1980. A survey of the housing situation in Canmore, summary and analysis of results. Prepared for Alberta Housing Corporation by Jamieson, Thomas & Associates Limited. 17 p. Appendices.

Summary of a survey of Canmore residents' attitudes to housing issues with an analysis of housing options and a review of recommendations to alleviate housing shortages.

321. Jin, Zhenkui. 1987. Sedimentation and Diagenesis of the Upper Devonian Cairn Formation, Western Alberta. Master's Thesis, University of Calgary, Calgary, AB. 231 p.

322. Jones, P.B.; Bielenstein, H.U. 1971. Road Log No. 2, The Coleman-Kananaskis Road From the Trans-Canada Highway to Snow Ridge Ski Lodge. In A guide to the Geology of the Eastern Cordillera along the Trans-Canada Highway between Calgary, Alberta and Revelstoke, British Columbia. Alberta Society of Petroleum and Geology, pp. 53-61.

323. Jorgenson, Jon T. 1984. Mt. Allan sheep survey, 29 November 1984. Unpublished report. Alberta Fish & Wildlife Division, Calgary, AB.

324. Jorgenson, Jon T.; Wishart, William D. 1987. Mount Allan bighorn sheep project. First Progress report, May 1985-August 1986. Unpublished report. Fish and Wildlife Division, Calgary. AB.

325. Jorgenson, J.T. 1986. Mount Allan bighorn sheep project: Progress Report. May 1985-August 1986. Unpublished report. Alberta Fish and Wildlife Division, Calgary, AB. 52 p.

326. Jorgenson, Jon T. 1987. Mount Allan bighorn sheep project. Second progress report, November 1986-April 1987. Unpublished report. Alberta Forestry, Lands and Wildlife, Fish and Wildlife Division, Calgary, AB. 44 p.

327. Jorgenson, J.T. 1987. Mount Allan bighorn sheep project: Second report. November 1986-August 1987. Unpublished report. Alberta Fish and Wildlife Division, Calgary, AB. 45 p.

328. Jorgenson, J.T. 1988. Environmental Impact of the 1988 Winter Olympics on bighorn sheep of Mount Allan. In Sixth Bi-annual Symposium of Northern Wild Sheep and Goat Council, 6, 121-135.

329. Jorgenson, J.T. 1988. Bighorn sheep survey of known winter ranges within the Calgary District of the Eastern Slopes region. Unpublished report. Alberta Fish and Wildlife Division, Calgary, AB. 30 p.

330. Jorgenson, J.T. 1990. Bighorn Sheep Survey of known winter ranges within the Calgary district of the Eastern Slopes region. Unpublished report. Alberta Fish and Wildlife Division, Calgary, AB. 34 p.

331. Jorgenson, J.T. 1991. Partial survey of elk winter ranges along the Eastern Slopes of Alberta. Bow River to Highwood River. Unpublished report. Alberta Fish and Wildlife Division, Calgary, AB. 17 p.

332. Kambeitz, Bob. 1991. The legal angle: The Queen v. Richard Bremmer and Bremmer Engineering and Construction Limited. Trout Canada. 1991(Winter), 25-27.

A summary of a court case is provided involving the disposal of silt laden water into Spring Creek, a tributary of the upper Bow River that flows through Canmore, Alberta. The silty water originating from construction activities to upgrade the town of Canmore sewer system.

333. Kansas, John, L.; Achuff, Peter L.; Raine, Michael, R. 1989. A food habits model for grizzly bear habitat evaluation in Banff, Jasper, Kootenay and Yoho National Parks. Unpublished Report. Prepared for Canadian Parks Service by Beak Associates Consulting Limited, Calgary, AB.

This report summarizes a grizzly bear habitat evaluation study conducted in the Mountain Parks. Biophysical land units are rated for habitat potential based primarily on food availability and occurrence of feeding sign. Some information contained in this report will be applicable to the Corridor.

334. Kansas, John L.; Raine, R. Michael; Gibeau L. 1989. Ecological studies of the black bear in Banff National Park, Alberta, 1986-1988. Final Report. Unpublished. Prepared for Canadian Parks Service by Banff National Park Warden Service and Beak Associates Consulting Limited, Calgary, AB, Various paging. Appendix.

The results of a three year radio-telemetry study of black bear in Banff National Park is presented in this report. Black bear use of ecological land units, food habits, movements, home ranges and population levels were investigated. The southern study area encompassed the lower Bow Valley including portions of the Bow Corridor. Much of the information contained in this report will be directly applicable to the Corridor.

335. Kansas, J.; Pall, O. 1983. The 1983 aerial survey for bighorn sheep for know winter ranges in Bow drainage of the Eastern Slopes region. Unpublished report. Alberta Fish and Wildlife Division, Calgary, AB. 43 p.

336. Kansas, John L.; Pall, O. 1983. The 1981 summer elk survey of the East Slopes of Alberta, Bow River to Waterton Park (1-8 August 1981). Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB.

337. Kansas, John L.; Pall, Orval. 1984. A summary of the 1983 aerial surveys of the Mount Allan area. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB. 27 p. Appendices.

This report presents the results of three 1983 aerial winter surveys of ungulates inhabiting the Mount Allan area, including the Wind Ridge - Pigeon Mountain area.

338. Klohn, Leonoff. 1985. Storm water Detention Ponds, Benchlands Development, Area 4 Canmore Alberta. Prepared for Alberta Mortgage and Housing Corporation. 45 p. Appendix.

Field investigations and recommendations for the construction of detention ponds.

339. Knapik, L. 1974. Detailed soil survey of the Canmore area. Report M-74-20. Edmonton, AB: Alberta Research Council, Alberta Institute of Pedology. 36 p. Map.

A detailed report useful for evaluating soil properties for urban and recreational development, evaluation of the engineering properties of soils for construction materials and sites, and to assess the agricultural capability of the land. The suitability or limitation of soils for selected uses are described.

340. Kostaschuk, R.A.; Macdonald, G.M.; Putnam, P.E. 1986. Depositional Process and Alluvial Fan-drainage Basin Morphometric Relationships near Banff, Alberta. In Earth Surfaces Processes and Landforms, 11, (5), 471-484.

341. KPMG Peat Marwick Stevenson & Kellogg Management Consultants. 1990. Bow-Canmore Area Market Demand Study. Prepared for Alberta Tourism by the authors. 178 p. Appendices.

A detailed marketing report including a review of existing products/services and markets/visitor profiles, development opportunities, and an examination of comparable areas. Market demand and product market trends are reviewed with an analysis of specific potential market opportunities.

342. Kunelius, Rick. 1985. Bighorn sheep monitoring. Banff National Park, 1985. Unpublished report. Banff National Park, Warden Service, Banff, AB. 37 p. Appendices.

The results of a 1985 aerial survey of bighorn sheep for Banff National Park, including a portion of the Fairholme Range north of Canmore. Population sizes, distribution, age, and sex class grouping are presented.

343. Lamoureaux, R.J.; Chow, G.G.; Reeves, B.O.K. 1983. Environmentally significant areas report. A summary. Prepared by R.J. Lamoureaux and Associates Limited. Calgary, AB: Calgary Regional Planning commission. 86 p.

This report is a summary of the Environmentally Significant Areas study. Phase Two Report.

344. Lamoureux, R.J.; Chow, G.G.; Reeves, B.O.K. 1983. Environmentally significant areas study. Phase Two Report. Prepared by R.J. Lamoureaux and Associates Limited, Calgary, AB: Calgary Regional Planning Commission. 229 p. Appendices.

The intent of this study is to provide an environmental information base to enable proper consideration of Environmentally Significant Areas during the planning process. Areas with important biophysical, palaeontological, archaeological and historical resources are identified and mapped. Recommendations for minimizing impacts on these resources or preserving them is presented.

345. Landalis, Maureen. 1974. Kananaskis-Elbow. A survey of park potential. Alberta Recreation Parks and Wildlife. 116 p.

This report includes an evaluation of the recreational and park potential of lands within the Kananaskis-Elbow area and including the Bow Corridor. Included is an overview of biophysical attributes, existing recreational facilities and recreation potential. Also presented is an analysis of potential park areas, identification of special sites and study recommendations.

346. Landals, Alison, J. 1988. Historical resource impact assessment proposed recreational development NW22-TP24-R8-W5, near Seebe: Final Report, Permit 88-84. Unpublished report. Prepared for Jacquelin Thomson, Calgary, AB., by Environmental Management Associates, Calgary, AB.

This project area is located southeast of Bow Valley Provincial Park, between the Bow and Kananaskis Rivers.

347. Landplan Associates Limited, et al. 1991. Bow-Canmore Visual Impact Assessment-Design Manual. Prepared by Landplan Associates Limited., Calgary, AB., and Design Workshop Inc., Aspen, CO. Edmonton, AB: Alberta Tourism. 73 p.

This document is intended for use by proponents, planners and administrators of development in the valley. The Design Manual may be appropriately applied to a given project throughout the conceptual design, planning and construction phases of development.

348. Landplan Associates Limited, et al. 1991. Bow-Canmore Visual Impact Assessment Report. Prepared by Landplan Associates Limited, Calgary, AB., and Design Workshop Inc., Aspen, CO. Edmonton, AB: Alberta Tourism. 120 p. Appendix.

A detailed comprehensive visual quality analysis employing Geographical Information System technology in developing a process to minimize visual impacts of developments in the Corridor. It is intended to be used as a guide in establishing a methodology for the visual impact assessment component of any environmental impact assessments required in the valley.

349. Landplan Associates Limited, et al. 1991. Bow-Canmore Visual Impact Assessment-Technical Appendix. Prepared by Landplan Associates Limited., Calgary, AB., and Design Workshop Inc., Aspen, CO. Edmonton, AB: Alberta Tourism. 90 p.

This technical appendix provides more detailed information regarding computerized derivation of the data for the study as well as further explanation of the methodology. It should be used as an appendix to the Bow-Canmore Visual Impact Assessment-Report, by providing technical clarification as necessary.

350. Landplan Associates Limited. 1991. Bow-Canmore Visual Impact Assessment. Technical Appendix. Prepared for Alberta Tourism, Edmonton by the authors, Calgary, AB. 78 p. Appendices.

Technical report to the Bow-Canmore Visual Impact Assessment Report. Includes detailed information on computer assisted Geographical Information System analysis of the study area and further explanation of the study methodology employed.

351. Landplan Associates Limited, et al. 1991. Bow-Canmore Visual Impact Assessment Slide Presentation. Prepared by Landplan Associates Limited, Calgary, AB., and Design Workshop Inc., Aspen, CO. Edmonton, AB: Alberta Tourism. (Photographic slides and guide.)

This slide presentation with an accompanying written text is intended for use as an introduction to the visual impact assessment process in the Bow Corridor. It is organized in three sections; firstly, a general introduction to visual impact assessments; secondly, the methodology used in this assessment and the findings; and thirdly, the implementation of the findings and guidelines for visually appropriate development.

352. Landplan Associates Limited, et al. 1991. Bow-Canmore Visual Impact Assessment-Digital Tapes of Maps. Prepared by Landplan Associates Limited., Calgary, AB., and Design Workshop Inc., Aspen, CO. Edmonton, AB: Alberta Tourism. (Digital files).

All of the original computer base data as well as the maps that have been generated are available in digital format for use with future studies in the Bow Corridor.

353. Legresley, E.M. 1982. Structural Relationships Between the Exshaw Thrust and Heart Mountain Syncline, Exshaw, Alberta. Bachelor's Thesis, McMaster University, Hamilton, ON. 127 p.

354. Legresley, E.M.; Clifford, P.M. 1984. Structural Relationships Between Exshaw Thrust and Heart Mountain Syncline, Exshaw, Alberta. Summary Only. Geological Association of Canada and Mineralogical Association of Canada, Joint Annual Meeting, London, Ontario, May 14-16, 1984. Geological Association of Canada. 9, 83.

355. Locat, J.; Cruden, D.M. 1977. Major Landslides on the Eastern Slopes of the Southern Canadian Rockies. Fifteenth Annual Symposium on Engineering Geology and Soils Engineering, Pocatello, Idaho, USA, April 6-8, 1977. EGSSB, 15, 179-197.

356. Lombard North Group Limited. 1979. Bicycle trails, master plan study for Kananaskis Country recreation plan. Prepared for Recreation, Parks and Wildlife, Provincial Parks Division, Edmonton, AB. Various pagination.

This study included a detailed analysis of bicycle related recreational opportunities and developments for Kananaskis Country, including

the Bow Corridor. Included in this report is discussion on the planning process, facility design guidelines, operational guidelines and a literature review of bikeway planning and relevant policy affecting the area.

357. Lombard North Group Limited. 1979. Bicycle trail study, Kananaskis Country Recreation Plan. Draft and summary. Prepared for Recreation, Parks and Wildlife, Provincial Parks Division, Edmonton, AB.

This document provides an overview and summary of the Kananaskis Country Bicycle trails study approach and of the contents of the Bicycle Trails Master Plan.

358. Lombard North Group Limited. 1979. Kananaskis Country equestrian trail master plan for the Elbow/Sheep and Canmore Corridor subregions. Prepared for Parks, Recreation and Wildlife, Housing and Public Works, and Forest Service of the Government of Alberta by the authors, Calgary, AB. 202 p.

This report includes a detailed analysis of equestrian recreational opportunities for Kananaskis Country, including the Bow Corridor. A biophysical overview along with environmental impacts of equestrian related developments is presented. Design, management, operation and associated costs of the proposed equestrian plan are provided.

359. Lombard North Group Limited. 1979. Kananaskis Country trails and wildlands study. Prepared for Housing and Public Works & Recreation, Parks and Forest Service, Government of Alberta by the author, Calgary, AB. Various pages.

A brief biophysical overview of the Bow Corridor is presented in this report with emphasis on recreational opportunity analysis and land use recommendation. Hiking trail and campground development guidelines are proposed with attention to minimizing environmental impacts.

360. Lombard North Group (1980) Limited. 1980. Kananaskis Ranch Golf Course and Family Destination Development Permit Submission. Prepared for The Municipal District of Bighorn No. 8. by the authors, Calgary, AB. 101 p. Appendix.

This report includes an overview of the biophysical and cultural inventory, proposed development, potential impacts, and mitigative

measures for the property. Appendix includes articles on fertilizers and golf course impacts.

361. Lombard North Planning Limited. 1972. Environmental Impact Study: Trans-Canada Highway Mile 0-7.8, Banff National Park. Prepared for the Department of Works, Western Region, Calgary, by the author Calgary, AB.

362. Longmore, L.A., Stenton, C.E. 1981. The fish and fisheries of the South Saskatchewan River basin. Their status and environmental requirements. Unpublished report. Prepared for Alberta Environment, Planning Division by Alberta Energy and Natural Resources, Fish and Wildlife Division. 273 p. Appendix and bibliography.

This report documents existing information available regarding fish ecology and production, limiting factors, sport and commercial use of fish populations, recreational fishing opportunities and data gaps in fish and fisheries knowledge. Water quality criteria and minimum stream flow for maintenance (or enhancement) of fish and aquatic life is provided. The Banff Park boundary to Seebe section of the Bow River is discussed as a unit.

363. Lukey, Ann; Pall, Orval. 1984. Winter elk aerial surveys in the East Slopes of Alberta (Bow to Highwood) from 1974 through 1978. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB.

The results of winter elk aerial surveys in the Eastern Slopes and including portions of the Bow Corridor are summarized in this report. Included are counts and distributions of elk and other ungulates, and population structures of observed ungulates for each year from 1974 to 1978.

364. Mackintosh, Sheila Catherine. 1981. Second homes in the Calgary Hinterland. Master's Thesis. Department of Geography, University of Calgary, Calgary, AB.

This study includes an analysis of spatial distribution of second homes and travel patterns for the Calgary hinterland and identifies growth trends. General and specific information in this report pertains to the Canmore area.

365. Mandryk, Gregory Byron. 1988. Pleistocene valley glacier sedimentology and stratigraphy in the Banff-Canmore area of Alberta, Canada. Master's Thesis, University of Alberta, 1986. Ottawa, ON: National Library of Canada.

366. Matthews, J. Gordon. 1956. The non-metallic mineral resources of the Cochrane - Canmore area, Alberta. Guidebook, 6th Annual field conference, August, 1956. Alberta Society of Petroleum Geologists. pp. 39-43.

367. McCallum, Martha; Lewis, Carla; Wakelyn, Leslie A. 1984. Potential impacts of the Mount Allan ski facility on Bighorn sheep and elk and proposed mitigation measures. Unpublished draft report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB. 52 p. Appendices.

368. McCrory, Wayne; Herrero, Stephen. 1981. An evaluation of grizzly bear autumn feeding sign and habitat in the Upper Highwood River Valley, Alberta. Unpublished report. Prepared for Alberta Fish and Wildlife Division, Calgary, AB. 178 p. Maps.

    In this report the results of a subjective evaluation of grizzly bear habitat and habitat use in the upper Highwood River Valley, Kananaskis Country, is presented. Information pertaining to late summer/fall diets of grizzly bears in this area is provided. Although the study area is well outside of the Bow Corridor, the habitat and diet related findings of this study will generally also apply to the Corridor area.

369. McCrory, Wayne; Herrero, Stephen; Toth, Tim. 1982. Grizzly bear habitat potential and feeding areas in the Kananaskis and Spray Lakes Valleys. Unpublished report. Prepared for Alberta Fish and Wildlife Division, Calgary by BIOS Environmental Research and Planning Associates Limited, Calgary, AB. 372 p.

    This report provides an assessment of grizzly bear habitat use and capability in the Kananaskis and Spray Lakes Valleys with emphasis on those areas where developments are occurring or proposed. Besides identifying areas of important grizzly bear habitat a preliminary evaluation of the seasonal diet of grizzly bears in Kananaskis Country is included. Although the study area is south of the Bow Corridor the information contained in this report will generally be relevant for grizzly bear diet and habitat use in the Corridor.

370. McCully, R.Allan. 1978. Canmore Corridor regional trails plan. Master's thesis, University of Calgary, Calgary, AB. 171 p. Map.

371. McNamara, L.B.; Wardlaw, N.C.; McKellar, M. 1991. Assessment of porosity from outcrops of vuggy carbonate and application to core. Bulletin of Canadian Petroleum Geology. University of Calgary, Department of Geology and Geophysics, Calgary, AB. 39(3) pp. 260-269.

372. Meijer Drees, N.C.; Johnston, D.I.; Anonymous. 1991. The Upper Devonian Palliser Formation in the type area near Exshaw, Alberta. Canadian Society of Petroleum Geology 1991 convention, Canada. BCPGA, 39(2), 219.

373. Mickle, D.; Fortin, G.; Kunelius, R. 1986. Status of wolves, Banff National Park, 1986. Unpublished report. Banff National Park, Warden Service, Banff, AB. 31 p. Appendix.

This report summarizes available information regarding wolf population sizes, distribution, ecology and other information regarding wolves in Banff National Park.

374. Mill, T.A.; Anderson, Per. 1980. Inventory of non-game mammals in Kananaskis Country. Planning Document No. 3. Alberta Energy and Natural Resources, Fish and Wildlife Division. 60 p.

The status and management of non-game mammals in Kananaskis Country was investigated and reported on. Information presented in this report can be applied to the Bow Corridor due to ecological similarities and proximities of the lands studied.

375. Mitchell, G.J.F. 1959. Aerial census of big game south of the Bow River. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division. 11 p.

376. Moffat, I.W. 1980. Geometry and Mechanisms of Transverse Faulting, Rocky Mountain Front Ranges, Canmore Alberta. Master's Thesis, University of Calgary, AB.

377. Moffat, I.W.; Spang, J.H. 1980. Geometry and Mechanisms of Transverse Faulting, Rocky Mountain Front Ranges, Canmore, Alberta. Summary Only. AAPG-SEPM-EMD Annual Meeting, Denver, Co., USA, June 8-11, 1980. AAPG Bulletin. 64 (5), 751-752.

378. Moffat, I.W.; Spang, J.H. 1980. Mechanisms of Transverse Faulting in the Rocky Mountain Front Ranges, Canmore, Alberta. Summary Only. The Geological Society of America, Rocky Mountain Section, 33rd Annual Meeting, Ogden, UT, USA, May 16-17, 1980. Geological Society of America, 12(6), 298.

379. Moffat, I.W.; Spang, J.H. 1984. Origin of Transverse Faulting, Rocky Mountain Front Ranges, Canmore, Alberta. Bulletin of Canadian Petroleum Geology, Canada. 32(2), 147-161.

380. Monenco Consultants Limited. 1980. Kananaskis Country fish rearing facility. Progress report, phase II. Unpublished report. Prepared for Department of Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB. Appendices and map.

In this report the three top ranked fish rearing sites, as determined by Phase I of this study, are investigated in detail to determine development suitability and feasibility of each. Details of water quality/quantity and site characteristics are included.

381. Monenco Consultants Limited. 1980. Kananaskis Country trout rearing facility, Volume 1. Feasibility of ground and surface water supplies. Final report. Unpublished report. Prepared for Department of Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB., by the author, Calgary, AB.

This volume includes an analysis of surface and ground water quality/quantity investigations in the Kananaskis Country area for the purpose of locating a suitable fish rearing facility site. Also included is information on other developments in the area, fish diseases, heating alternatives and final selection of potentially suitable sites.

382. Monenco Consultants Limited. 1980 Kananaskis Country trout rearing facility, Volume 2. Siting alternatives at Bow Springs. Final report. Unpublished report. Prepared for the Department of Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB. by the author, Calgary, AB.

This volume presents the results of studies of four alternative fish rearing facility locations, at Bow Springs, and gives an environmental evaluation of each. The environmental evaluation identified sensitive terrain, vegetation associations, wildlife occurrence and habitat use, and ranked each site according to

evaluated impacts. Special consideration of the development impact on resident elk is presented. Details of site selection and associated costs are included.

383. Monenco Consultants Limited. 1980. Kananaskis Country trout rearing facility. Additional ground water investigation at Bow Springs. Final Report Draft. Unpublished report. Prepared for the Department of Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB., by the author, Calgary, AB.

This report summarizes investigations of ground water yields and quality for test drill sites located in the Exshaw-Bow Valley Provincial Park area and impacts of ground water withdrawal on bogs and springs in the area is reviewed.

384. Monenco Consultants Limited. 1980. Report on additional feasibility and pre-design studies at the Bow Springs site, Kananaskis Country fish rearing facility. Draft. Prepared for the Department of Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB. by the author, Calgary, AB. Maps and Appendices.

This report presents the results of the ground/surface water quantity and quality monitoring program for Bow-Springs. Potential fish rearing site locations are analyzed along with alternative site locations. Technical appendices include the Terms of Reference, hydrogeological data and details of the environmental evaluation.

385. Monenco Consultants Limited, 1981. Final Report, Kananaskis Country, Trout Rearing Facility. Additional Ground water Investigation at Bow Springs. Prepared for the Department of Energy and Natural Resources, Fish and Wildlife Division. January, 1981.

386. Monenco Consultants Limited. 1981. Kananaskis Country trout rearing facility water monitoring at Exshaw and Bow Springs. Final report. Unpublished report. Prepared for the Department of Energy and Natural Resources, Fish and Wildlife Division, Calgary AB., by the author, Calgary, AB. Various paging.

In this report surface and ground water quality, quantity and temperature related to alluvial aquifers in the Exhsaw-Seebe area is examined.

387. Montreal Engineering Company. 1967. Undeveloped storage and power site investigations. Unpublished report. Prepared for Calgary Power Limited. (A collection of reports). Appendices.

A review of storage and power site investigations up to 1966. Locations include portions of the Bow Corridor.

388. Moss, E.H. 1983. Flora of Alberta. A manual of flowering plants, conifers, ferns, and fern allies found growing without cultivation in the Province of Alberta, Canada. (Second edition, revised by J. Packer). Toronto, ON: University of Toronto Press.

This plant identification guide includes all flora occurring in the Bow Corridor.

389. Mountain Meadows Golf Ltd. 1991. Proposed Nordic Meadows golf course development environmental impact assessment. Prepared for Alberta Environment, Environmental Impact Assessment Review Branch, Edmonton, AB. 79 p. Maps.

This report focuses on a review of the effect of past underground mine workings on the proposed development site; and secondly an identification and assessment of the significance of the proposed development's impact on the site location, Canmore Creek and the area's fisheries and wildlife resources. Impacts during construction and operation is examined. It also suggests ways to avoid, alleviate or minimize adverse effects.

390. Municipal District of Bighorn No. 8. 1992. Municipal District of Bighorn No. 8 General Municipal Plan, March, 1992. Draft. Exshaw, AB: Author.

This recent General Municipal Plan contains general development policies related to subdivision and development, recreation, municipal finances, condominium development, bed and breakfast, and housing. Policy subjects pertaining to the Bow Corridor include environmental, rural conservation area, tourism and recreation, industrial, transportation and utilities, urban community and comprehensive land use concepts. Environmental policies for the corridor address issues related to flood control, ecosystems, and environmental policies related to urban and industrial development.

391. Nichols Applied Management & Delcan Western Ltd. 1991. Town of Canmore Annexation Study. Prepared for submission to the Local Authorities Board on behalf of the Town of Canmore by the authors Edmonton and Calgary, AB., respectively.

This report: 1) summarizes the review and analytical process which identified the need for the annexation of adjacent lands; 2) examines the various expansion or boundary alternatives that appeared to be available to Canmore to meet its needs; and 3) evaluates in some detail the specific annexation application before the local Authorities Board.

392. Nichols Applied Management. 1983. Canmore Fiscal impact study. Prepared for the Town of Canmore, Canmore and Calgary Regional Planning Commission, Calgary, AB. Calgary, AB: Calgary Regional Planning Commission. 19 p. Appendices.

This report includes a fiscal impact model for Canmore which incorporates population growth rates, housing, capital works, industrial and commercial developments, and projected growth of tourism.

393. Niemann, O.; Langford, G.; More, G.. 1984. Avalanche Hazard Mapping Integrating Landsat Digital Data and Digital Topographic Data. In Proceedings of the 8th Canadian Symposium on Remote Sensing and 4th Conference of L'Association Quebecoise de Teledetection. 8, 261-271.

394. Nietfeld, M.; Wilk,J.; Woolnough K,; Hoskin, B. 1984. Wildlife habitat requirement summaries for selected wildlife species in Alberta. Alberta Energy and Natural Resources, Fish and Wildlife Division.

395. Norris, D.K. (n.d.) Structural conditions in coal mines of the Canmore area, Alberta. (Publisher and city unknown.) Unpaginated.

Paper summarizes a detailed study of structural conditions in coal mines of the Camedian Cordillera as encountered in seams mined by Canmore Mines Limited, Canmore, Alberta.

396. Norris, Donald Kring. 1956. Structural conditions in coal mines of the Canmore area, Alberta. Alberta Society of Petroleum Geologists, Guidebook, 6th Annual field conference, August 1956. Alberta Society of Petroleum Geologists. pp. 59-65.

397. Norris, D.K. 1957. Canmore, Alberta (82 0/3 in part) Map 11-1957. Paper 57-4. Ottawa, ON: Department of Mines and Technical Surveys, Geological Survey of Canada. 8 p. Map.

Review of the stratigraphy and structure, with special emphasis on mineable coal seams, for the area covered by the southeast corner of the Canmore sheet (82 0/3 W 1/2).

398. Norris, D.K. 1965. Structural Analysis of Three Extension Faults in Number 4 Mine, Canmore, Alberta. Paper 65-16. Ottawa, ON: Canada Department of Mines and Technical Surveys, Geological Survey of Canada.

399. Norris, D.K. 1971. The geology and coal potential of the Cascade Coal Basin. In I.A. Halladay and D.H. Mathewson (Eds.), A geological guide of the Eastern Cordillera along the Trans Canada Highway between Calgary and Revelstoke. Canadian Exploration Frontiers Symposium Banff, Alberta- September 22-26, 1971. The Alberta Society of Petroleum Geologists. 94 p.

Discussion of the history of historical mining activity stratigraphy of the coal-bearing Kootenay Formation, evaluation of coal quality, structural fabric of coal seams and resource potential of the Cascade Coal Basin geographically centred in Canmore, Alberta.

400. Northwest Hydraulic Consultants Limited. 1977. Hydraulic Model study of river training works Bow River at Canmore. Unpublished report. Prepared for Alberta Environment, River Engineering Branch. 51 p. Appendix.

Hydraulic model study to aid in the conceptual design of training works for the Bow River at Canmore.

401. Nowicki, J.J.; White, S.R.; Corey, S.C. 1971. Methodology for the Foothills Resource Allocation Study. Report No. 1. Edmonton, AB: Department of Regional Economic Expansion and Department of Lands and Forests. Unpaginated.

An integrated planning report for renewable resource allocation in the Alberta Foothills Region. Study area encompassed the Bow Corridor.

402. O'Connor Associates Limited. 1981. Canmore Benchlands Slope Stability Study. Prepared for Alberta Housing Corporation. 105 p. Appendix.

Geological inventory and field test to evaluate slope stability and make recommendations related to development considerations.

403. O'Leary, Dennis J. 1988. Integrated Resource Inventory and Evaluation of the Bow Corridor Integrated Resources Planning Area. Edmonton, AB: Alberta Forestry, Lands and Wildlife, Land Information Service Division. 38 p. Appendices.

In this study the landscape of the Bow Corridor is classified on an ecological basis at a scale of 1:20,000 and land units are evaluated primarily for suitability for ungulates and facility siting developments.

404. Ohrn, D.R. 1984. To protect the symbolic landscape of Alberta. A proposal. Prepared with the assistance of the Canada Council. 198 p. Appendix.

Visual quality inventory and assessment of the corridor between Calgary and Banff National Park. A description of recreational and tourist traffic is followed by a detailed scenic protection program.

405. Ozoray, G.F.; Barnes, R. 1978. Hydrogeology of the Calgary-Golden area, Alberta. Report 77-2. Edmonton, AB: Alberta Research Council. 38 p. Map.

This report covers hydrogeological characteristics of the Bow Corridor and also describes ground water yields and water quality.

406. Pachel, D.L.; Van Camp, J. 1979. Kananaskis Country, Fish and Wildlife bibliography. Planning Document #1. Alberta Energy and Natural Resources, Fish and Wildlife Division. 52 p. Appendices.

This comprehensive bibliography was initiated to assist the Kananaskis Country Planning Team of Alberta Fish and Wildlife Division. Emphasis of this report is on fisheries and wildlife related materials.

407. Packer, J; Bradley, C. 1984. A checklist of the rare vascular plants in Alberta. Occasional Paper 5. Edmonton, AB: Alberta Culture, Provincial Museum of Alberta Natural History.

This document includes a listing of rare plants in Alberta and indicates their distribution.

408. Paetz, M.J. 1986. The fish and fisheries of the Bow River Sub-basin. Their status, environmental requirements and management considerations. Preliminary Draft. Alberta Energy and Natural Resources, Fish and Wildlife Division. Various pages. Appendices.

This report is an update and elaboration of fisheries information originally provided to Phase II of the South Saskatchewan River Basin Plan. Fish populations and fisheries habitat is identified, consumptive demand, recreational opportunities and data gaps are also discussed. The section of Bow River from Banff National Park east gate to Seebe is evaluated as one reach.

409. Pall O. 1979. Summer aerial survey for elk in the Calgary Region, August 16-20, 1979. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division. 21 p.

410. Pall O.; Cooper, C. 1986. The 1986 winter elk survey of the Eastern Slopes of Alberta - Bow River to Highwood area. Unpublished report. Alberta Fish and Wildlife Division, Calgary, AB. 30 p.

411. Pall, O.; Kansas, J. 1982. The 1982 winter elk survey of the Eastern Slopes of Alberta. Bow to Highwood (February/March 1982). Unpublished report. Alberta Fish and Wildlife Division, Calgary, AB. 27 p.

412. Pall, Orval; Kansas, John. 1983. The 1982 winter elk survey of the East Slopes of Alberta - Bow to Highwood area (February/March 1982). Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB.

Generally an annual elk survey that has been flown since the early 1970's that includes portions of the Bow Corridor.

413. Pall O.; Klassen, L. (n.d.). The 1980 winter elk survey in Region II. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division. 24 p.

414. Pall, Orval; Klassen, Lynn. 1981. Region II Mountain Moose drainage survey (February, 1980). Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB.

415. Pall O.; Klassen L.; Lukey, A. 1981. The 1980 summer elk survey in Region II- July 1980. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division.

416. Pall O.; Lukey, A. (n.d.) The 1981 winter elk survey in Region II (February 1981). Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division. 15 p.

417. Pannell Kerr Forster Management Consultants. 1985. Calgary-Canmore Tourism destination area study. Volume I: Inventory and assessment. Unpublished report. Prepared for Travel Alberta, Edmonton by the author, Calgary, AB. 367 p. Appendices included.

A detailed report which includes an inventory and assessment of existing tourism resources and potential tourism development opportunities in the Canmore area. Also gives an overview of biophysical resources, heritage resources (specific sites documented in Appendix), socio-economic characteristics, and visitor activity patterns. Relevant local and regional plans and policies are reviewed.

418. Pannell Kerr Forster Management Consultants. 1985. Calgary-Canmore tourism destination area study, Volume II: Tourism development strategy. Prepared for Travel Alberta, Edmonton by the author, Calgary, AB. 59 p.

This report gives a summary of the inventory and assessment of resources, tourism markets, plans and policies and development opportunities for the study area. Tourism development strategies are proposed and evaluated.

419. Pannell Kerr Forster Management Consultants. 1985. Calgary-Canmore tourism destination area study. Volume IV: Canmore tourism survey. Prepared for Travel Alberta, Edmonton by the author, Calgary, AB. 23 p. Appendices.

Survey results of Canmore resident's attitudes toward tourism in the Canmore area.

420. Pannell Kerr Forster Management Consultants. 1985. Calgary-Canmore tourism destination area study, Executive Summary. Prepared for Travel Alberta, Edmonton by the author, Calgary, AB.

Summary report of Volume 1 (Inventory and Assessment) and Volume II (Tourism Development) of the Calgary-Canmore tourism destination area study.

421. Pannell Kerr Forster. 1990. Market Feasibility Study, Proposed Family Destination Resort, Dead Man's Flats, Alberta. Unpublished report. Prepared for Randall R. Gibson & Associates by the author, Calgary, AB. 80 p. Appendix.

Main topics of the report are site analysis, general market characteristics, analysis of supply and demand, estimates of market demand, and recommended development.

422. Pannell Kerr Forster. 1990. Market Feasibility Study 18 Hole Golf Course Development Dead Man's Flats, Alberta. Unpublished report. Prepared for Randall R. Gibson & Associates. 58 p.

Main topics of the report are site analysis, general market characteristics, analysis of supply and demand and recommended development.

423. Paquet, P.C.; Huggard, D.; Curry, S. 1990. Banff National Park Canid Ecology study. First Progress Report, April 1989 to April 1990. Unpublished report. Prepared for The Canadian Park Service by John/Paul and Associates, Onanole, MAN. 28 p.

A preliminary progress report on wolf ecology research being conducted in the area of Banff National Park. The study area includes portions of the Bow Corridor. Permission to quote is required from the author.

424. Parks, Shelley Fullerton. 1986. Modelling a small regional economy, a case study of Canmore, Alberta. Master's thesis, University of Calgary, 1986. Ottawa, ON: National Library of Canada. 2 microfiches.

425. Parks Canada. 1977. Bow River, from Bow Lake to Seebe. A description and evaluation of recreational potential for canoeing and kayaking. Navigable Mountain River Study. Parks Canada, Western Region, Natural History Research Section. 98 p.

In this report assessment of navigability and recreational potential of the Bow River reach through the Corridor is presented. Maps included illustrate river course hazards and shoreline biophysical attributes in good detail.

426. Patching, T.H. 1985. Canmore Mining Operations. In Coal in Canada; Special Volume - Canadian Institute of Mining and Metallurgy. 31, 191 p.

427. Paul, Pat; Pall, Orval. 1982. Kananaskis Country mountain moose drainage survey (March, 1982). Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB. 20 p. Appendices.

This report summarizes the results of an aerial moose survey that included portions of the Bow Corridor. It is the second follow up to the 1976 survey.

428. Pennel Geotechnical Engineering Limited. 1980. Supplemental report on subsoil conditions at Rundleview Estates, Canmore, Alberta. Unpublished report. Prepared for Patrician Lands Corporation Limited, Calgary. 5 p. Appendices.

This brief document reviews the history of coal mining techniques in the Canmore area and gives the results of a field investigation of subsoil conditions.

429. Porter, J.W. 1971. Nineteenth Century Bow Valley Exploits. In A guide to the Geology of the Eastern Cordillera along the Trans- Canada Highway between Calgary, Alberta and Revelstoke, British Columbia. Alberta Society of Petroleum and Geology. pp. 1-16.

430. Praxis. 1991. Canmore economic development survey results. Volume I, Main Report. Prepared for the Town of Canmore, Economic Development Committee by the author, Calgary, AB.

Results of a survey of Canmore residents and non-permanent residents' opinions regarding current and future economic development opportunities and constraints. Attitudes towards quality of life issues, environmental protection and downtown improvements are included. Data regarding household characteristics is also presented.

431. Price, R.A. 1970. Geology, Canmore (East half of map 1266A, 1:50,000). Ottawa, AB: Geological Survey of Canada.

432. Price, R.A. 1970. Geology, Canmore (West half of map 1266A, 1:50,000). Ottawa, ON: Geological Survey of Canada.

433. Price, M.; Hamilton, W.; Fides, B. 1991. Alberta mineral deposits and occurrences (HyperCard stacks). Open File Report 1991-17, Alberta Research Council.

434. Primus, C. L. 1981. River Basin planning in Alberta, current status - future issues. Canadian Water Resources Journal, 6(4), 44-50.

Bow River basin planning objectives and approaches are discussed along with management of other river basins in Alberta.

435. Productivity Management Consulting Limited. 1991. Contribution of the Bow Corridor Rock Industry to the Alberta regional economy. Prepared for Alberta Economic Development and Trade by the author, Edmonton. 24 p. Appendices.

A review of the Bow Corridor's rock material resources, the existing rock industry and current infrastructure. It includes a examination of the impact of the rock industry on the local and regional economy and the potential for future development.

436. Quaedvlieg, M.T.; Gunderson, G.; Cook, A. 1973. Status of the Rocky Mountain goat in the Province of Alberta. Wildlife Inventory Special Report. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division. 52 p.

437. Quaedvlieg, M.T.; Gunderson G.; Cook, A. 1973. Calgary region sheep and goat surveys, February 1973. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division. 13 p.

438. Quaedvlieg, M.T.; Boyd, M.; Gunderson G.; Cook, A. 1973. Documentation of the non-trophy sheep season, 1966-1972. Wildlife Inventory Job Completion Report XXII. Unpublished reprt. Alberta Energy and Natural Resources, Fish and Wildlife Division. 29 p.

439. Raine, Michael; Pall, Orval. 1985. Results of the February and March 1985 aerial ungulate surveys of the Mount Allan area. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB.

440. Raine, R. Michael; Pall, Orval; Carr, Harold D. 1985. The 1984-1985 winter ground surveys of ungulates in the Mount Allen area. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB. 36 p. Appendices.

Included in this report is the monthly distribution, movement patterns, population structures, mortality levels and degree of lungworm infection found within the bighorn sheep of Mount Allen. This report also discusses harassment concerns related to bighorn

sheep. Additional information on the distribution and numbers of other wildlife, particularity elk, in the Mount Allan - Pigeon Mountain - Wind Ridge area is provided.

441. Randall R. Gibson & Associates. 1990. Rivers Bend Golf Course Family Destination Resort Area Dead Man's Flats, Alberta. Prepared for Municipal District of Bighorn No. 8. 59 p. Appendix.

Conceptual development plan for the purposes of development permit application. The report includes a description of the natural resource base, a conceptual development plan, infrastructural considerations, and a discussion of opportunities and issues. The appendix includes an initial environmental evaluation of the site and a number of articles on golf course impacts on the environment.

442. Randall R. Gibson & Associates. 1991. Rivers Bend Golf Course and Family Destination Resort Area. Dead Man's Flats, Alberta. Prepared for B.H.B. Canmore Limited. 80 p. Appendix.

Project overview and description together with a discussion of potential impacts on the resource base. Topics include water quality, water management, fish and wildlife, proposed sewage and water supply, solid waste management and visual impacts.

443. Reeves, Brian. 1972. An inventory of archaeological resources in the Rocky Mountains, Edson, Grand Prairie Forest Reserves including areas of local improvement districts No. 5 (Crowsnest Pass) and No. 46 (Bow Corridor).

444. Reeves, B.O.K.; Malmberg, D. 1978. Bow Corridor Study, Supplementary Bulletin, Historic and prehistoric archaeological site inventory-Canmore Corridor. Unpublished report. Lifeways of Canada Limited, Calgary, AB. 66 p. Appendix and illustrations.

An inventory and assessment of Bow Corridor archaeological/ historical features to determine scientific, interpretive and recreational capabilities. Includes a review of relevant historical expeditions and suggests recommendations for preservation and interpretation of important sites.

445. Reeves, B.O.K. 1990. Draft Report Historical Resources Impact Assessment Rivers Bend R.V. Park and Golf Course (ASA permit 90-108). Unpublished report. Prepared for B.H.B. Canmore Limited by Lifeways of Canada Limited. 11 p.

An Historical Resources Impact Assessment was undertaken of the proposed Rivers Bend R.V. Park and Golf Course, located in Dead Mans Flats area of the Bow Corridor. This study included foot reconnaissance and inspection of disturbed areas, shovel hole prospecting and backhoe prospecting in areas of potential for historical and archaeological materials.

446. Reeves, B.O.K. 1990. Final Report: Historical resources impact assessment River Ben R.V. Park and Golf Course. 13-24-10-W5, 18-24-9-W5 (ASA Permit 90-108) Unpublished report. Prepared for B.H.B. Canmore Limited, Canmore, AB., by Lifeways of Canada Limited, Calgary, AB.

447. Reid Crowther & Partners Limited. 1980. Improvement District No.8, Hamlet of Exshaw sewer and water feasibility study. Prepared for Calgary Regional Planning Commission, Calgary by the authors, Calgary, AB. 27 p.

A review of the existing water and sewage system is included along with proposed upgrading systems and an analysis of associated costs.

448. Reid, Crowther & Partners Limited. 1981. A review of proposed visitor facility developments at Harvie Heights and proposed Terms of Reference for an analytical study. Prepared for James K. Gray by the authors, Calgary, AB. 20 p. Appendices.

A review of problems associated with orderly development of the Bow Corridor is discussed to identify key issues and propose a concept to rectify inter-jurisdictional planning and developmental conflicts.

449. Reid Crowther & Partners Limited. 1983. Bow Corridor Regional Utilities Study. Prepared for Alberta Environment by the authors, Calgary, AB. 96 p. Appendices,

This report provides a more detailed examination of water supply and sewage system requirements for the Bow Corridor as outlined in the Bow Corridor Utilities Study Summary.

450. Reid Crowther & Partners Limited. 1983. Bow Corridor Regional Utilities Study. Summary. Prepared for Alberta Environment by the authors, Calgary, AB. 25 p.

A summary document of a study that evaluated the water supply, and sewage treatment and disposal requirements for the entire Bow Corridor to the year 2008. Includes a review of existing conditions, identifies demands, analyzes alternative systems and provides recommendations.

451. Reid Crowther & Partners Limited. 1983. Bow Corridor Regional Utilities Study. Volume II (Part 4,5). Draft. Prepared for Alberta Environment by the authors, Calgary, AB.

This appendix form report contains detailed information on surface and ground water supplies for the Bow Corridor. An analysis of existing land use and projected needs for water and sewage systems is included. This document provides details in support of Volume I of this study.

452. Reid Crowther and Partners Limited. 1983. Alberta Environment, Working Paper #1, Bow Corridor Regional Utilities Study. Unpublished contract report.

453. Reid Crowther & Partners Limited. 1983. Hamlet of Exshaw update of 1980 utility report. Prepared by the author, Calgary, AB. 47 p. Appendices.

Included in this report is an update of costs presented in the 1980 report on sewage collection and treatment for Exshaw. Alternative treatment methods are evaluated and associated costs are provided.

454. Reid Crowther & Partners Limited. 1983. Feasibility study for sewage service to the Three Sisters Subdivision, Pigeon Mountain. Prepared for Alberta Municipal Affairs, Improvement District No. 8, by the authors, Calgary, AB. 24 p. Appendices.

Investigations of Pigeon Mountain's existing and projected sewage system needs is included in this report. Alternative options and associated costs are provided.

455. Riggert, V.L. 1983. The Geometry and Mechanical Development of the Heart Mountain Thrust Stack, Exshaw, Alberta. Master's Thesis, University of Calgary, AB. 175 p.

456. Riggert, V.L.; Spratt, D.A. 1984. The Geometry and Mechanical Development of the Heart Mountain Thrust Stack, Exshaw, Alberta. Montana Geological Society 1984 Field Conference. pp. 231-243.

457. Ronaghan, B; Newton, B. 1990. The Bow Corridor First Albertans Project, Preliminary results. Alberta Past, 6(2).

458. Ross, D.A. 1976. Bow Valley Solid Waste Disposal Evaluation Study. Unpublished report. Alberta Environment. Environmental Protection Services. 12 p. Appendix.

A suitability analysis of landfill site opportunities, within the Bow Corridor, for the purpose of accommodating Banff and Yoho National Parks' refuse.

459. Rump, P.C. 1967. The recreational land use of the Bow, Kananaskis and Spray Lakes Valleys. Unpublished Master's thesis, Department of Geography, University of Calgary, Calgary, AB. 185 p.

460. Ruston/Tomany & Associates Limited. 1989. Rocky Mountain National Parks Utilization Study, Stage I. Visitor use and profile survey report. Volume I, Executive summary. Prepared for Travel Alberta and Canada/Alberta Tourism Agreement (C.A.T.A.).

Stage I of this study (Volume I, II and III) provides detailed data on visitors to Banff, Jasper, Kootenay and Yoho National Parks. The three volume set describe volume and value of visitors, visitor profiles, current use patterns and other characteristics of visitors and visitor use patterns. This information was collected to enable preparation of a marketing and development plan for the future of the parks (Stage II).

461. Ruston/Tomany & Associates Limited. 1989. Rocky Mountain National Parks Utilization Study, Stage I. Visitor use and profile survey report. Volume II, General Summary: Volume, value and trip characteristics. Prepared for Travel Alberta and Canada/Alberta Tourism Agreement (C.A.T.A.).

See description of Stage I under Volume I of this study.

462. Ruston/Tomany & Associates Limited. 1989. Rocky Mountain National Parks Utilization Study, Stage I. Visitor use and profile survey report. Volume III, general summary: Activities, sites and attitudinal information. Prepared for Travel Alberta and Canada/Alberta Tourism Agreement (C.A.T.A.).

See description of Stage I under Volume I of this study.

463. Rutter, N.W. 1966. Glacial history of the Bow River valley. Canadian Alpine Journal, 49, 157-172.

464. Rutter, N.W. 1968. A method for predicting soil erosion in the Rocky Mountain Forest Reserve, Alberta. Ottawa, ON: Department of Energy, Mines and Resource, Geological Survey of Canada. 31 p.

The erodibility of various surficial materials is examined. A method of predicting soil erosion potential based on surficial material, vegetation, slope and precipitation factors is presented.

465. Rutter, N.W.; Wyder, J.E. 1969. Application of borehole stratigraphic techniques in areas of mountain glacial drift in Alberta, Canada. Canada Geological survey paper 69-35. 16 p.

466. Rutter, N. 1972. Geomorphology and multiple glaciation in the area of Banff, Alberta. Bulletin 206. Ottawa, ON: Geological Survey of Canada. 54 p.

467. Sadler, T.S. 1975. Birds of the Kananaskis Region. Calgary Field Naturalist. 6: 231-235, 265-268.

468. Salt, W.; Salt, J. 1976. Birds of Alberta. Edmonton, AB: Hurtig.

This monograph describes bird species of Alberta, their habitat requirements and distribution.

469. Savoy, Lauret Edith. 1990. Sedimentary record of Devonian-Mississippian carabonate and black shale systems, southernmost Canadian Rockies and adjacent Montana; facies and processes. Thesis, Syracuse University, Syracuse, NY,USA. 295 p.

470. Scace, Robert C.; Thompson, John P. 1989. Recreation and tourism in the context of the Bow River. Draft for presentation to The Bow River - sharing the River in the thirsty future, multiple use and sustainable development Conference, November 19-22, 1989, Calgary. Co-sponsored by Canadian Water Resources Association and Alberta Irrigation Projects Association. Scace and Associates Limited, Calgary, AB. 25 p. Footnotes.

A review of Bow River based recreational activities and trends, evaluation of present relevant policy and planning guidelines. Includes suggestions for a more suitable integration of recreation demands into future policy and plans to achieve sustainable development goals.

471. Scheelar, M. 1976. Detailed soil survey of the Canmore Corridor area. Edmonton, AB: Alberta Research Council, Soil Division. 45 p. Map.

A detailed report useful for evaluating soil properties for urban and recreational development, evaluation of the engineering properties of soils for construction materials and sites, and to assess the agricultural capability of the land. The suitability or limitation of soils for selected uses are described.

472. Schurman, S.; Hall, W.K. 1976. Documentation of the 1975 non-trophy sheep season. Unpublished report. Special Project Job Competition Report No. A-77. Alberta Energy and Natural Resources, Fish and Wildlife Division. 51 p.

473. Schurman, S.; Hall, W.K. 1977. Documentation of the 1977 non-trophy sheep season. Unpublished reprt. Alberta Energy and Natural Resources, Fish and Wildlife Division. 29 p.

474. Schurman, S.; Hall, W.K. 1978. Documentation of the 1976 non-trophy sheep season. Alberta Energy and Natural Resources, Fish and Wildlife Division. 31 p.

475. Scott & Associates Engineering Limited. 1985. Harvie Heights Feasibility Study of Sewage Collection and Treatment. Prepared for Improvement District No. 8 Council, Alberta Municipal Affairs by the authors, Calgary, AB. 19 p. Appendices.

An analysis of waste water collection and treatment system options and associated costs for the Hamlet of Harvie Heights.

476. Scruggs, Gordon Garfield. 1956. The Alberta group of the Bow Valley area, Alberta. Guidebook, 6th Annual field conference, August 1956. Alberta Society of Petroleum Geologists. pp. 21-32.

477. Seasons, Mark L. 1985. Economic development in the Calgary region. Current practice and future approaches. Master's Thesis. University of Calgary, Faculty of Environmental Design, Calgary, AB. 283 p. Appendices and bibliography.

This document is the product of an examination of economic development in small communities of the Calgary Region. While theoretical in nature it does make specific reference to Canmore and is applicable to that town. Historical and existing economic conditions are evaluated and analysis is performed to develop an economic planning approach suitable for the needs of small communities.

478. Sheppard, Robert Frank. 1977. The ecology and home range movements of Ambystoma macrodactylum Krause: (Amphibia: Unrodela). Unpublished master's thesis. University of Calgary, Department of Biology, Calgary, AB. 73 p. Appendices.

This paper presents information on the ecology of the long-toed salamander in the Canmore study area. Seasonal distribution, seasonal movements, home range sizes and various biological aspects of this salamander are examined.

479. Skjonsberg, T. 1990. Bighorn Sheep monitoring report. Unpublished report. Banff National Park, Warden Service, Banff, AB. 45 p.

The results of a 1988 aerial survey of bighorn sheep for Banff National Park, including a portion of the Fairholme Range north of Canmore. Population sizes, distribution, age, and sex class grouping are presented.

480. Smith, B. 1983. Wildlife mitigation measures T.C.H. Phase I contingency plan for wildlife intrusions into highway right of way. Unpublished report. Parks Canada.

481. Spohr, Gregory. 1976. Selected climbs in the Canmore area. Alpine Club of Canada. 37 p. Map.

482. Spry, I.M. (Ed.), 1968. Papers of the Palliser Expedition, 1857-1860. Toronto, ON: The Champlain Society.

483. Spry, I. M. 1973. The Palliser Expedition an account of John Palliser's British North American Exploring Expedition 1857-1860. Toronto, ON: Macmillan Company of Canada Limited.

484. Stanley Associates Engineering Limited. 1986. Transportation and Utilities study of the Calgary Region. Prepared for Calgary Regional Planning Commission by the authors, Calgary, AB. 101 p. Appendices.

A comprehensive inventory and review of information concerning transportation and utility systems existing in the Calgary Region including the Bow Corridor. Included is an assessment of future transportation and utility system needs based on projected population growth patterns and a review of policies and guidelines for land uses adjacent to regional networks.

485. Statistics Canada. (n.d.) 1976 Census of Canada Community Profile. Compiled by Alberta Bureau of Statistics, Alberta Treasury, Edmonton from Statistics Canada information.

Statistics included in this profile include demographics, culture, education, labour and other information for municipal districts and incorporated towns in Alberta. Additional information is available from Alberta Bureau of Statistics.

486. Statistics Canada. 1983. 1981 Census of Canada. Population for geographic townships in Alberta. (Preliminary.) Compiled by Alberta Bureau of Statistics, Edmonton, from Statistics Canada information.

Population counts by Alberta township for 1976 and 1981 are included in this collection.

487. Statistics Canada. 1983. 1981 Census of Canada. Census divisions and subdivisions. Population, occupied private dwellings, private households and census and economic families in private households. Selected social and economic characteristics. Ottawa, ON: Statistics Canada. 338 p. Appendices.

Statistics based on 20 % sample of households in 1981, for incorporated towns and for Improvement Districts. Included is detailed information on demographics, industry income and other information.

488. Statistics Canada. 1983. 1981 Census of Canada. Population of unincorporated places in Alberta: 1961,1966,1971,1976 and 1981. (Preliminary.) Compiled by Alberta Bureau of Statistics, Edmonton, from Statistics Canada information. 19 p. Appendices.

This document includes demographics statistics for Census divisions within the Bow Corridor.

489. Statistics Canada. 1987. Population and dwelling characteristics. Census division and subdivisions. Alberta: Part 1. Profiles. Ottawa, ON: Statistics Canada.

Statistics from 1986 related to demographics, housing and family characteristics collected from all households including locations in the Bow Corridor.

490. Statistics Canada. 1988. 1986 Census of Canada. Population of western provinces and the Territories, place name reference lists. Ottawa, ON: Statistics Canada.

Population counts and location information for all Alberta census units is included in this publication.

491. Statistics Canada. 1988. Population by township Calgary Region 1986 census. Preliminary. Prepared for Calgary Regional Planning Commission by the author, Edmonton, AB.

Population and dwelling counts by Alberta township for 1986 is included in this collection.

492. Statistics Canada. 1988. Population and dwelling characteristics. Census division and subdivisions. Alberta: Part 2. Profiles. Ottawa, ON: Statistics Canada.

Includes statistics collected from a 20% sample of households for census areas, including the Bow Corridor. It presents social, cultural, labour, 1985 income data and other information on housing and families.

493. Steber, J. 1990. Planner's update: Bow corridor local integrated resource plan, March 1990. Alberta Forestry, Lands and Wildlife, Resource Planning Branch, Edmonton.

494. Stegenga, L.; Jorgenson, J. 1987. The 1987 winter elk survey of the East Slopes of Alberta - Bow River to Highwood area. Unpublished report. Alberta Fish and Wildlife Division, Calgary, AB. 23 p.

495. Stegenga, Les; Pall, Orval; Lukey, Ann. 1983. The 1983 summer elk survey of the east slopes of Alberta, Bow River to Waterton National Park (28 July - 8 August, 1983). Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB.

The summer elk aerial survey has generally been conducted annually in the area of the Bow Corridor.

496. Stegenga, Les,; Pall, Orval,; Lukey, Ann. 1983. The 1983 summer elk survey of the east slopes of Alberta , Bow River to Waterton National Park (28 July - 8 August, 1983). Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB.

497. Stelfox, Jim 1979. Policeman's Creek and Spring Creek fall spawning study. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB. 25 p. Appendices.

In this report the fall spawning locations, timing, and habitat of Policeman's Creek and Spring Creeks are investigated, 1979. Important habitat and rearing areas are identified, and recommendations for preservation and enhancement of these fisheries is presented.

498. Stelfox, James D. 1979. Bow River Spawning Channels Fall Spawning Study. Unpublished report. Energy and Natural Resource, Fish and Wildlife Division, Calgary, AB. 10 p.

In this report the results of filed investigations identifying important spawning channels in the Bow Corridor are summarized. A brief evaluation of the impact of a proposed fish rearing facility is included.

499. Stelfox, J.D. 1980. Kananaskis Country fall spawning survey. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB. 25 p. Appendices and maps.

This report contains information concerning fall spawning locations, timing and duration for water bodies in Kananaskis Country and including the Bow Corridor.

500. Stelfox, J.D.; Nibourg, J. H. 1983. Inventory of beaverponds in Kananaskis Country: A progress report. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB. 15 p. Appendices.

501. Storr, D.; Ferguson, H. L. 1973. The distribution of precipitation in some mountainous Canadian watersheds. Pages 243-263. In Distribution of precipitation in mountainous areas, Volume II. Proceedings of the Geilo symposium, Geilo, Norway, July 31-August 5, 1972. World Meteorological Organization Publication No. 326 (2 volumes), Geneva, Switzerland.

This source includes a discussion of three International Hydrologic Decade Experimental Basin projects located on the Eastern Slopes of the Rocky Mountains in Alberta.

502. Strom, K.; Van Egmond, T. D.; Berger, Robert P.; Green, Jeffrey E. 1991. A review of information on vegetation and wildlife in the vicinity of the Three Sisters Golf Resorts Inc. property near Canmore, Alberta. Draft Report. In Environmental Impact Assessment Report, Three Sisters Resorts, Vegetation and Wildlife, Technical Report 9.3-4. Prepared for Three Sisters Golf Resorts Inc., by The Delta Environmental Management Group Limited., Calgary, AB. 51 p. Appendices.

This document is a synthesis of available literature and information obtained through field studies on vegetation and wildlife occurrence and habitat use in the Bow Corridor. It includes a review of rare and endangered species occurrence, and of existing consumptive and non-consumptive wildlife resource use.

503. Strong Lamb & Nelson Limited. 1975. Exshaw, proposed land-use and subdivision. Prepared for Calgary Regional Planning Commission by the authors, Calgary, AB. 9 p.

A preliminary landuse feasibility study for Exshaw, Alberta and immediate area.

504. Strong Lamb & Nelson Limited. 1975. Three Sisters Area Sanitary Feasibility Study. Prepared for Alberta Municipal Affairs by the authors, Calgary, AB. 17 p.

Investigations into the sewage system needs of The Three Sisters Area are presented in this report. Alternative sewage systems and associated costs are examined.

505. Strong W.L.; Leggat, K.R. 1981. Ecoregions of Alberta. ENR Technical report No. T/4. Edmonton, AB: Alberta Energy and Natural Resources, Resource Evaluation and Planning Division. 52 p. Appendices and map.

In this document the montane, subalpine and alpine ecoregions of Alberta are described. Vegetation, climate, and soil characteristics of each ecoregion are discussed. The various provincial ecoregions are mapped at a scale of 1:1,500,000.

506. Sweetgrass Consultants Limited. 1991. Environmentally Significant Areas in the Bow River Corridor. Prepared for Municipal District of Bighorn, Exshaw, AB: No. 8. 41 p. Map.

This recent report contains a brief biophysical overview of the Bow Corridor, and discusses the evaluation and management of Environmentally Significant Areas in the study area. Reference to site specific concerns and information deficiencies is included..

507. Thompson, G.E. 1978. Bow River creel census, 1977. Unpublished preliminary draft. Alberta Energy and Natural Resource, Fish and Wildlife Division, Calgary, AB. Unpaginated.

508. Thompson, G.E. 1978. Canmore Corridor Fisheries Management Plan. Unpublished preliminary draft. Department of Recreation, Parks and Wildlife, Fish and Wildlife Division, Calgary, AB. 28 p.

The main objectives of this draft plan are to maintain and enhance the Bow Corridor fisheries and surface waters, and to provide conservation and resource management education to the public. This report contains various detailed information on fish populations and fisheries habitat within the Corridor.

509. Thompson, G.E.; Norris, H.J. 1976. A three month creel survey of the Upper Bow River along with an interpretation on why anglers go fishing. Preliminary draft. Unpublished report. Alberta Department of Recreation, Parks and Wildlife, Fish and Wildlife Division, Calgary, AB.

This report summarizes the findings of a creel survey conducted in the Upper Bow River drainage, including the Bow Corridor. Angler success, catch profile and angler profiles are discussed along with comparisons to 1967, 1970, 1971 and 1975 creel survey data.

510. Thompson, W.C. 1975. Three early severe flood producing storms in Alberta. Environment Canada. 16 p.

The causes of three record floods, two of which occurred on the Bow River in 1897 and 1902 are analyzed.

511. Timoney, Kevin P.; Geddes, Frank. 1990. Biophysical inventory of the Canmore Flats Natural Area. Draft Report. Alberta Forestry, Lands and Wildlife, Resource Information Branch. 31 p. Appendices.

512. Underwood McLellan & Associates Limited. 1971. Land Capability Inventory in the Canmore Corridor. Unpublished report. Prepared for the Dillingham Corporation, Canmore, by the author, Calgary, AB. 141 p. Appendices.

This report reviews existing government policies and plans, socio-economic trends, transportation and utility systems, land tenure, biophysical and cultural resources.

513. Underwood McLellan & Associates Limited. 1971. The Canmore Properties. Volume 2: Concept Planning. Unpublished report. Prepared for Dillingham Properties Limited., Canmore, by the author, Calgary, AB. 29 p.

A concept plan for the Canmore Properties describing proposed land uses with a brief review of environmental considerations.

514. Underwood McLellan & Associates Limited. 1971. The Canmore Properties, Volume 3: Implementation. Unpublished report. Prepared for Dillingham Properties Limited., Canmore by the author, Calgary, AB. 63 p.

An engineering document with costing analysis and implementation information for the Canmore Properties proposed development.

515. Underwood McLellan & Associates Limited. 1974. Feasibility study of a sanitary sewage system for Blocks 2 & 3, Plan 4171, Canmore, Alberta. Prepared for Alberta Municipal Affairs, Improvement District No. 8, Edmonton, by the author, Calgary,AB.

Report on a feasibility and cost study of a sanitary sewer system for sites located on the west side of the Bow River in Canmore.

516. Underwood McLellan & Associates Limited. 1975. Report on the non-river engineering methods of reducing flood damage in The Town of Canmore. Unpublished report by the author, Calgary, AB. 28 p. Maps.

Summary document describing existing hydrogeological conditions for Canmore, development considerations and recommendations for new development guidelines and zoning by-laws. Included are proposed policy amendments aimed at reducing ground water damage to property.

517. Underwood McLellan & Associates Limited. 1975. Regional solid waste management study Banff/Yoho National Parks and Bow Valley Corridor. Prepared for the Government of Canada. 114 p. Appendix.

This report describes environmental problems, garbage quantities generated and present handling methods for waste generated within the National Parks. Recommended new approaches are provided.

518. Underwood McLellan & Associates Limited. 1976. West Canmore Concept Plan, Canmore, Alberta. Unpublished report. Prepared for Dillingham/Canmore Mines Limited, Calgary by the author, Calgary, AB. 15 p. Appendix.

A Concept Plan proposal for a single-family residential development in and adjacent to a proposed annexation of the Town of Canmore. Includes preliminary utility layout and cost estimate.

519. Underwood McLellan & Associates Limited. 1976. Canmore Engineering Feasibility Study. Prepared for Calgary Regional Planning Commission, Calgary by the author, Calgary, AB. 116 p. Appendices and map.

Potential development areas are proposed based on environmental, topographic, subsoil and utility system constraints analysis.

520. Underwood McLellan & Associates Limited. 1977. Report on subsoil conditions at proposed West Canmore Concept Plan, Canmore, Alberta. Unpublished report. Prepared for Dillingham/Canmore Mines Limited., Canmore, by the author, Calgary, AB. 10 p. Appendix and maps.

A technical document describing subsoil properties, at West Canmore, for the purpose of ascertaining slope stability conditions and potential restraints to development.

521. Underwood McLellan & Associates Limited. 1977. Dillingham Properties, Canmore, Alberta; Land inventory and analysis. Prepared for Dillingham Corporation, by the authors, Calgary, AB. 22 p.

522. Underwood McLellan & Associates Limited. 1990. Three Sisters Structure Plan. Draft. Prepared for Three Sisters Golf Resorts Inc. by the authors, Calgary, AB. Various paging. Appendices.

A draft structure plan for Three Sisters Resorts study area covering goals and objectives, and plan policies regarding land uses, and development characteristics and phasing. Included is a technical appendix with architectural guidelines and mining related considerations.

523. Underwood McLellan & Associates Limited. 1990. Interim Environmental Assessment and Terms of Reference for the Three Sisters Environmental Impact Assessment Study. Phase 1-Canmore '75 to Three Sisters Creek. Prepared for Three Sisters Resorts Inc. by the authors, Calgary, AB. Various paging.

This report represents the first stage of development of the Terms of Reference proposed to consider the entire Three Sisters Project area. It is a compilation of all existing environmental information for the Three Sisters Resorts study area for the purpose of identifying information deficiencies and determine program scoping. The level of information available for each resource assessment and requirements

for further investigations is summarized. Information and deficiency assessments included are for climate and meteorology, snow avalanche hazards, geology, geotechnical hazard and soils, vegetation and wildlife, surface water hydrology, water quality, fisheries and historical resources. Also included is a proposed public involvement program, a review of socio-economic characteristics, transportation plans and a utility services concept plan.

524. Underwood McLellan & Associates Limited. 1991. Proposed International Destination Resort Environmental Impact Assessment Site "C". Volume I. Prepared for Three Sisters Golf Resorts Inc. by the authors, Calgary, AB. Various paging.

This report constitutes a formal EIA of Three Sisters Resorts Site "C" in response to The Terms of Reference issued by Alberta Environment in December 1990. Included is a project overview, infrastructure and servicing overview, and assessment of market demand. This reports also addresses the visual impacts, land and resource uses, geology, mining and geotechnical, vegetation and wildlife, surface water, water quality, aquatic resource, historical and archaeological resources, socio-economic and the integrated chemical and pest management program. The Terms of Reference for this study are provided in the appendix.

525. Underwood McLellan & Associates Limited, 1991. Proposed International Destination Resort Environmental Impact Assessment Site "C". Technical Appendices. Volume II. Prepared for Three Sisters Golf Resorts Inc. by the authors, Calgary, AB. Various paging.

This document consists of technical appendices related to the Vegetation and Wildlife Assessment, Water Quality, Aquatic Resources Assessment, Socio-economic Assessment and the Integrated Chemical and Pest Management Program for the EIA of Three Sisters Resorts Site "C" (see volume I).

526. Underwood McLellan & Associates Limited and The Delta Environmental Management Group Ltd. 1991. Response to deficiency statements for the Three Sisters Site "C" EIA. Submitted to Alberta Environment. Prepared for Three Sisters Golf Resorts Inc., Calgary, by the authors, Calgary, AB.

527. Underwood McLellan & Associates Limited. 1991. Overview to the draft Environment Impact Assessment Report. Submitted to Alberta Environment and the Natural Resources Conservation Board. Prepared for The Three Sisters Golf Resorts Inc. by the authors, Calgary, AB. XXIX p.

A general document which summarizes baseline conditions, expected impacts and proposed mitigative measures for each EIA component associated with the Three Sisters Resort development.

528. Underwood McLellan & Associates Limited. 1991. Volume I, Draft, Environmental Impact Assessment Report. Prepared for Three Sisters Golf Resorts Inc., Canmore, AB., by the authors, Calgary, AB., in association with The Three Sisters Project Consulting Team. Various paging.

This draft document is the first of two volumes plus technical appendices prepared for submittance to the Natural Resources Conservation Board (NRCB) in compliance with the Natural Resources Conservation Board Act and Rule of Practice. Volume I includes a profile of Three Sisters Golf Resorts Inc., an overview of the historical and present property setting and land uses, development constraints, the proposed development project land use and development phasing, and a review of tourism and housing facility needs and trends.

529. Underwood McLellan & Associates Limited. 1991. Volume II, Draft, Environmental Impact Assessment Report. Prepared for Three Sister Golf Resorts Inc., Canmore, AB., by the authors, Calgary, AB., in association with The Three Sisters Project Consulting Team. Various paging.

This report documents the findings of an Environmental Impact Assessment conducted for the residential/recreational development proposed by Three Sisters Golf Resorts Inc. The Terms of Reference supplied by Alberta Environment are addressed, including determination of the existing environmental conditions of the study area, development of assessments of important impacts, and design of mitigative measures. Important impacts discussed include wildlife and vegetation, water quality, fisheries, geology, air quality infrastructure, market demand, socio-economics, visual resources, transportation, water demand, and avalanche hazards.

530. Underwood McLellan & Associates Limited. 1991. Environmental Impact Assessment Reports, Three Sisters Resorts, Geology/Mining, Technical Report 9.2. Prepared for Three Sisters Golf Resorts Inc. by the author, Calgary, AB. 30 p.

This report gives an evaluation of the existing surface and geotechnical risks at the Three Sisters Golf Resorts property. Particular emphasis is on the risks associated with past mining activities. Geotechnical impacts and mitigative strategies are presented.

531. Underwood McLellan & Associates Limited. 1991. Environmental Impact Assessment Report, Three Sisters Resorts, Surface Water Hydrology, Technical Report 9.5a. An assessment for the Canmore/Bow Valley Corridor. Prepared for Three Sisters Golf Resorts Inc. by the author, Calgary, AB. 14 p. Maps.

Technical assessment of existing hydrology and hydrogeology of the Three Sisters Resort development area. Report includes a flood plan analysis, projected water requirements and related potential impacts and mitigations.

532. Underwood McLellan & Associates Limited. 1991. Environmental Impact Assessment Report, Three Sisters Resorts, Water Quality Study, Technical Report 9.5b. Prepared for Three Sisters Golf Resorts Inc. by the author, Calgary, AB. 72 p. Appendices.

Technical report outlining water quality baseline information available for the Three Sisters Resort project area. Also includes a review of the surface water monitoring program and mention of preliminary ground water data collection results.

533. Underwood McLellan & Associates Limited. 1991. Environmental Impact Assessment Report, Three Sister Resorts, Fisheries and Aquatic Resources, Technical Report 9.5c. An assessment for the Canmore/Bow Valley Corridor. Prepared for Three Sisters Golf Resorts Inc. by the author, Calgary, AB. Various paging.

Technical report on the inventory of fisheries and benthic invertebrate communities, in waters, in the vicinity of the Three Sisters Resorts.

534. Underwood McLellan & Associates Limited. 1991. Environmental Impact Assessment Report, Three Sisters Resorts, Integrative Pest Management Program, Technical Report 9.5d. An assessment for the Canmore/Bow Valley Corridor. Prepared for Three Sisters Golf Resorts Inc. by the author, Calgary, AB. 64 p.

Technical report outlining Three Sisters Resorts Inc. plans for pest management, of turf grass, and expected impacts of this plan. The plan includes pest management for diseases, weeds, insects and other animals. Includes a review of the proposed fertilizer program.

535. Underwood McLellan & Associates Limited. 1991. Environmental Impact Assessment Report, Three Sisters Resorts, Visual Resources, Technical Report 9.7. Unpublished report. Prepared for Three Sisters Golf Resorts Inc. by the author, Calgary, AB. 23 p.

Technical summary of the visual impact and assessment of Three Sisters Resorts, on the visual resources of the Bow Corridor. Includes methodology and analysis used and a review of the public consultation process.

536. Underwood McLellan & Associates Limited. 1991. Environmental Impact Assessment Report, Three Sisters Resorts, Socio-economics. Technical Report 9.9a. Unpublished report. Prepared for Three Sisters Golf Resorts Inc. by the author, Calgary, AB. Various paging. Appendices.

Technical document and discussion resulting from a Socio-economic Impact Assessment of the effects of the proposed Three Sisters development on the population and economy of the Bow Corridor. Analysis of the projected demands on the municipal utility service infrastructure is presented. Also included is an overview of present socio-economic conditions of the Bow Corridor, existing services and facilities, housing and transportation systems. Impacts and mitigative measure are provided and the design and results of the public consultation process are provided.

537. Underwood McLellan & Associates Limited. 1991. Environmental Impact Assessment Report, Three Sisters Resorts, Traffic Study, Technical Report "9.9b". Unpublished report. Prepared for Three Sisters Golf Resorts Inc. by the author, Calgary, AB. Various paging.

Technical report examining the potential traffic impact of full development of the Three Sisters Resorts area. Includes methodology, analysis and recommendations.

538. Urban Systems Limited. 1984. Pre-Design Evaluation, Roadways & Utilities Canmore Area 4. Prepared for Alberta Housing Corporation by the author, Calgary, AB. 73 p. Appendix.

Typical engineering report covering services for the hotel development area. Appendix includes results of geotechnical studies.

539. Urban Systems Limited. 1990. Master plan bylaw, Hyatt Regency Canmore at Banff National Park. Unpublished report prepared for Canmore Alpine Development Company Limited. by the author, Calgary, AB. 27 p.

A summary support document to the Hyatt Regency Canmore Master Plan Report. It provides information on objectives, proposed land uses, services, utilities, roadways, emergency access and public access.

540. Urban Systems Limited. 1990. Master Plan Report Hyatt Regency Canmore at Banff National Park. Unpublished report. Prepared for Canmore Alpine Development Company Limited. by the author, Calgary, AB. 45 p. Appendices.

A development master plan covering site analysis, proposed land uses, servicing and roadway development plans.

541. Urbanics Consultants Limited. 1982. Benchlands commercial market study. Prepared for Alberta Housing Corporation, Edmonton by the author, Vancouver, BC. 40 p.

This study included an overview of the economic and demographic trends of the Canmore area, identification of existing facilities and services, demand analysis and site share analysis of development opportunities.

542. Valley Views. 1974 - 74. Valley views. Serial. Canmore, AB. Serial. (Ceased publication in 1974.)

543. Van Egmond, T. D.; Green, J. E. 1990. Background information on vegetation and wildlife in the vicinity of the Three Sisters Property. Prepared for Three Sisters Resorts Inc., Calgary, by The Delta Environmental Management Group Limited, Calgary, AB. 37 p. Appendices.

544. Van Egmond, T. D.; Green, J. E. 1991. A concept plan for bighorn sheep habitat enhancement and reclamation at the abandoned coal mine test pit - the Three Sisters Property. Prepared for Three Sisters Resorts Inc., Calgary, by The Delta Environmental Management Group Limited, Calgary, AB. (9 p. Appendices.) In Proposed International Destination Resort. Environmental Impact Assessment Site "C". Technical appendices. Prepared for Three Sisters Golf Resorts Inc., Calgary, by Underwood McLellan & Associates Limited, Calgary, AB. Various paging.

545. Van Egmond, Timothy D.; Green, Jeffrey E. 1991. A wildlife mitigation and monitoring program for the proposed Three Sisters Golf Resorts Project near Canmore, Alberta. Prepared for Three Sisters Golf Resorts Inc., Calgary, by The Delta Environmental Management Group limited, Calgary, AB. 27 p. Appendices and maps.

546. Van Waas, Neil. 1976. Biophysical analysis and evaluation of capability, Canmore Corridor. Prepared for The Eastern Slopes Interdepartmental Planning Committee by Alberta Energy and Natural Resources, Resource Evaluation Branch, Edmonton. 64 p.

A detailed biophysical report for the Bow Corridor with emphasis on surficial geology, landform, slope and vegetation for specific land uses such as agriculture, forestry, ungulate production, waterfowl production and recreational opportunities. Includes a list of plant associations for various ecosites.

547. Walker, C. G. 1979. Canmore Corridor Integrated Land Management Plan. ENR Report No. 96. Edmonton, AB: Alberta Energy and Natural Resources, Resource Planning Branch. 28 p.

This plan provides a framework for development on public lands in the Bow Corridor. Existing and proposed land uses are discussed with delineation of land use zones provided. Land use recommendations and implementation of the plan is addressed.

548. Wallis, C.A.; Wershler, C.R. 1972. An ecological survey of Bow Valley Provincial Park Volume I. Unpublished report. Prepared for Alberta Lands and Forests, Parks Division. 12 p. Appendices.

This report consists of a brief overview of wildlife and vegetation associations found within Bow Valley Provincial Park. Also included is a detailed inventory of wildlife and plant species occurring there. Vegetation cover types, special areas, erosion hazards, disturbed areas and human developments are provided in map form.

549. Wallis, C.A.; Wershler, C.R. 1972. An ecological survey of Bow Valley Provincial Par. Volume II. Unpublished report. Prepared for Alberta Department of Lands and Forests, Provincial Parks Planning. Unpaginated.

This appendix volume consists of the field data sheets completed as a basis of the ecological survey of Bow Valley Provincial Park.

550. Wallis, C.; Wershler,C. 1981. Natural history inventory and assessment in the Many Springs area, Bow Valley Park. Final Report 1981, Volume I. Unpublished report. Prepared for Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB.

This report identifies plant associations and wildlife habitat at Many Springs near the Bow Valley Provincial Park. The environmental importance and sensitivity of this area are discussed in context to the proposed trout rearing facility for this location.

551. Wallis, C.; Wershler, C. 1981. Natural history inventory and assessment in the Many Springs area, Bow Valley Park. Final Report 1981, Volume II. Unpublished report. Prepared for Alberta Energy and Natural Resources, Fish and Wildlife Division, Calgary, AB.

This appendix volume accompanies Volume I of this title and contains the vegetation and wildlife field data sheets for data collected in the Many Springs study area.

552. Water, D. 1988. Monitoring program and mitigative measures, Trans Canada Highway twinning, Phase I- km 0 to km 11.4. Final Report. Canadian Parks Service, Banff National Park, AB.

This final report discusses the effectiveness of highway fencing and underpasses installed along the Trans Canada highway in Banff

National Park in terms of ungulate movements, design and maintenance problems.

553. Water Quality Branch, Canada. (Various years.) Detailed surface water quality data, Alberta. Ottawa, ON: Environment Canada, Inland Waters Directorate, Western and Northern Region, Water Quality Branch.

These reports include chemical, physical and biological surface water data for Alberta collected over various time periods. Reports are available for the periods covering 1961-73, 1974-76, 1977-79, 1980-81, 1982 and 1983. More recent data is not published but is available from NAQUADAT computer files. Also refer to the **Monitoring Programs and Studies in Progress** section.

554. Water Quality Branch, Canada. (Various years.) Summary of water quality data from the Rocky Mountain National Parks. (Various periods.) Presented to Parks Canada by the Department of Environment, Inland Waters Directorate, Water Quality Branch.

Results of water quality monitoring efforts for various Rocky Mountain National Parks are provided in these summary reports. Reports available include:

| Period Covered | Year of Report |
|---|---|
| 1972-1975 | 1976 |
| 1975-1976 | 1977 |
| 1976 (Apr.-Dec.) | 1979 |
| 1980 - 1981 | 1984 |
| 1982 | 1985 |

555. Water Quality Branch, Canada. 1974. Water quality in the Rocky Mountain National Parks, Volume II. Presented to the Department of Indian and Northern Affairs, Parks Canada by the Department of Environment, Inland Waters Directorate, Water Quality Branch. 51 p. Appendices.

This report presents water quality data collected from Banff National Park and other parks. Levels of biocides, heavy metals, trace elements and bacteria were studied.

556. Water Quality Branch, Canada. 1979. Bacteriological and nutrient study of major surface waters in Banff National Park. Presented to Parks Canada by the Department of Fisheries and Environment, Water Quality Branch. 44 p. Appendices.

Existing water quality of the Bow River and other surface waters is studied. Discussion of the effects of local human activity on water quality is included.

557. Water, Brent, B.; Spencer, Ronald J.; Demicco, Robert V. 1989. Three-dimensional architecture of shallowing-upward carbonate cycle; Middle and Upper Cambrian Waterfowl Formation, Canmore, Alberta. In Bulletin of Canadian Petroleum Geology, 37(2), 198-209.

558. Waters, N.; Love, B.; Marion, K. & Stanley Associates Engineering Limited. 1986. Regional settlement patterns of the Calgary region. Prepared for Calgary Regional Planning Commission by Stanley Associates Engineering Limited and The University of Calgary, Calgary, AB. 79 p. Appendices.

A background technical document including an overview of historical and present settlement patterns and influential forces in the Calgary region including the Bow Corridor. Also a series of future settlement pattern scenarios with identified driving forces and resulting implications are presented based on computer modelling simulations.

559. West Mount Press Limited. 1983 - . Canmore Leader. Weekly Serial. Publications Mail Registration No. 6876. Canmore, AB: West Mount Press Limited. ISSN 0824-3646.

A local weekly newspaper published in Canmore and reporting on area topics relevant to the Bow Corridor.

560. Wiebe, A.P. 1979. Kananaskis Country spring spawning survey. Unpublished report. Alberta Energy and Natural Resources, Fish and Wildlife Division., Calgary, AB. 20 p. Appendices and map.

Included in this report is a summary of spring spawning related information for streams within Kananaskis Country, including the Bow Corridor.

561. Wiebe, A.P. 1979. Biological survey of Gap Lake, 1979. Unpublished report. Department of Energy and Natural Resources, Fish and Wildlife Division. 17 p. Appendices.

Physical, chemical and biological attributes of Gap Lake were studied to determine the feasibility or necessity of replacing the existing fish population with a hatchery raised brown trout population.

562 Williams, J. A. 1989. Bow Valley Provincial Park species checklist. Alberta Recreation and Parks, Kananaskis Country, Canmore, AB. 21 p.

563. Wiseley, Allen N. 1979. A review of birds and their habitats in Kananaskis Country. Alberta Energy and Natural Resources, Fish and Wildlife Division. 117 p. Appendices.

The bulk of this document consists of an annotated checklist of all species of birds recorded for Kananaskis Country, including areas in the Bow Corridor. Major habitat types with associated bird community groups are discussed, and habitat/species management opportunities are reviewed.

564. Wiseley, Allen N. 1980. Habitat Management and manipulation for wildlife, in Kananaskis Country. Strategies and methodology. Planning Document No. 7. Alberta Energy and Natural Resources, Fish and Wildlife Division. 46 p. Appendix.

This document identifies techniques of habitat manipulation suitable for achieving wildlife habitat enhancement objectives for lands in the Kananaskis Country, including the Bow Corridor.

565. Woods, John G. 1991. Ecology of a partially migratory elk population. Ph.D. thesis paper. The University of British Columbia, Department of Zoology, Vancouver, B.C. 149 p. Includes appendices.

This thesis investigates the ecology and seasonal movements of Bow River Valley elk in Banff National Park, Alberta. Population characteristics including recruitment, composition and mortality is presented.

566. Woods, J.G. 1990. Effectiveness of fences and underpasses on the Trans-Canada highway and their impact on ungulate populations project - Final Report. Calgary, AB: Canadian Parks Service, Western Region.

An evaluation of the effectiveness of fencing and underpass systems employed by Banff National Park to minimize highway related wildlife mortalities. Detailed ecological data on wildlife population benchmarks are supplied for comparison purposes in assessment of the impact of the project on wildlife, especially elk.

567. Workum, R.H.; Hedinger, A.S.; Geldsetzer. 1988. Kananaskis area Frasnian reefs, Alberta. Institution of Sedimentary and Petroleum Geology, Canada, 13, 557-560.

568. Wright-Broughton,C. 1960. Photogeological interpretation and compilation, Exshaw-Golden. Alberta Society of Petroleum Geologists. 2 Maps.

569. Wright-Broughton, C.; Chamney, T.P.; Hennessey, W.J.; Eccles, J.K.; Brady, W.B. 1970. A geological guide along the highways between Drumheller-Calgary-Lake Louise. Prepared for The American Association of Petroleum Geologists and The Society of Economic Palaeontologists and Mineralogists, 1970 Convention. Published by The Alberta Society of Petroleum Geologists. 44 p. Map.

A geological guide book designed for self guided interpretation of surface geology across four distinct geological provinces between Drumheller and Lake Louise, Alberta. Includes some historical information pertinent to particular interpretive station points.

570. Yonge, C.J. 1986. Canmore Caverns: Tourist Attraction. Canadian Ventures, 1(9), 9.

571. Yonge, C.J. 1989. The Rats Nest Cave Project. Tenth International Congress of Speleology Proceedings. pp. 170-172.

572. Yonge, C.J. 1990. Rats Nest Cave: A provincial historic site. Inventory study submitted to the Alberta Historic Resources Foundation. 39 p. Photographs.

573. Yonge, C.J. 1991. Rats Nest Cave: Potential for an underground laboratory in the Canadian Rocky Mountains. Cave Science 18(3), 1-10.

574. Yonge, C.J.; Hansen T.M. 1987. Canmore Cavers Business Plan (Proposal to develop a portion of Rats Nest Cave as a show cave). 81 p.

575. Yonge, C.J. 1989. Isotopic studies of speleotherms from Rats Nest Cave, Alberta, Canada. (Abstracts) Tenth International Congress of Speleology Proceedings. 666 p.

576. Ziemkiewicz, P.F. (Ed.) 1983. Workshop Proceedings: Effects of coal mining on the hydrology of Alberta's Eastern Slopes, Edmonton, Alberta, December 1983. Report No. RRTAC 83-4. Edmonton, AB: Alberta Land Conservation and Reclamation Council. 123 p.

A review of the impacts of coal mining on the hydrology of the Eastern Slopes. Study area includes the Canmore area.

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